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 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  SEP 09   CA/CAplus records now contain indexing from 1907 to the
                   present
 NEWS  4  AUG 05   New pricing for EUROPATFULL and PCTFULL effective
                   August 1, 2003
 NEWS  5  AUG 13   Field Availability (/FA) field enhanced in BEILSTEIN
 NEWS  6  AUG 18   Data available for download as a PDF in RDISCLOSURE
 NEWS  7  AUG 18   Simultaneous left and right truncation added to PASCAL
 NEWS  8  AUG 18   FROSTI and KOSMET enhanced with Simultaneous Left and Righ
                   Truncation
 NEWS  9  AUG 18   Simultaneous left and right truncation added to ANABSTR
 NEWS 10  SEP 22   DIPPR file reloaded
 NEWS 11  DEC 08   INPADOC: Legal Status data reloaded
 NEWS 12  SEP 29   DISSABS now available on STN
 NEWS 13  OCT 10   PCTFULL: Two new display fields added
 NEWS 14  OCT 21   BIOSIS file reloaded and enhanced
 NEWS 15  OCT 28   BIOSIS file segment of TOXCENTER reloaded and enhanced
 NEWS 16  NOV 24   MSDS-CCOHS file reloaded
 NEWS 17  DEC 08   CABA reloaded with left truncation
 NEWS 18  DEC 08   IMS file names changed
 NEWS 19  DEC 09   Experimental property data collected by CAS now available
                   in REGISTRY
 NEWS 20  DEC 09   STN Entry Date available for display in REGISTRY and CA/CAplus
 NEWS 21  DEC 17   DGENE: Two new display fields added
 NEWS 22  DEC 18   BIOTECHNO no longer updated
 NEWS 23  DEC 19   CROPU no longer updated; subscriber discount no longer
                   available
 NEWS 24  DEC 22   Additional INPI reactions and pre-1907 documents added to CAS
                   databases
 NEWS 25  DEC 22   IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
 NEWS 26  DEC 22   ABI-INFORM now available on STN

 NEWS EXPRESS  DECEMBER 28 CURRENT WINDOWS VERSION IS V7.00, CURRENT
               MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
               AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
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 NEWS WWW      CAS World Wide Web Site (general information)

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* * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 15:59:39 ON 30 DEC 2003

=> file medline, uspatful, dgene, embase, wpids, fsta, jicst
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 0.21 0.21

FILE 'MEDLINE' ENTERED AT 16:00:05 ON 30 DEC 2003

FILE 'USPATFULL' ENTERED AT 16:00:05 ON 30 DEC 2003
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=> s pH-sensitive liposome
L1 76 PH-SENSITIVE LIPOSOME

=> s hepatistis B virus
L2 0 HEPATISTIS B VIRUS

=> s x-protein
L3 4979 X-PROTEIN

=> s hepatitis B virus
L4 89876 HEPATITIS B VIRUS

=> s l4 and l3
L5 1118 L4 AND L3

=> s l5 and l1
L6 3 L5 AND L1

=> d l6 ti abs ibib tot

L6 ANSWER 1 OF 3 USPATFULL on STN
TI Liposomes comprising peptide antigens derived from **X protein** of **hepatitis B virus**
AB The present invention relates to liposomes comprising novel peptide antigens which play a role in regulating human immunity against **hepatitis B virus**, more specifically, to peptide groups corresponding to epitopes of antigens derived from **X protein** of HBV which induce cycotoxic T lymphocytes against the virus or immunological tolerance to the virus, and pH-sensitive liposomes comprising said peptide groups to induce cellular immunity so that CTLs specific to the virus can be produced. Since peptide antigens derived from **X protein** such as X3,

X4, X5, X6 and X7 activate CTL which can recognize HBV antigens present in human body, and can also be recognized by the CTL, the said liposomes can be used for the development of proposed therapeutic agents for the prevention and treatment of HBV-associated diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:273552 USPATFULL
TITLE: Liposomes comprising peptide antigens derived from **X protein** of **hepatitis B virus**
INVENTOR(S): Kim, Tae-Yeon, Kyonggi-Do, KOREA, REPUBLIC OF
Lee, Ki-Young, Kyonggi-Do, KOREA, REPUBLIC OF
Chang, Jin-Soo, Seoul, KOREA, REPUBLIC OF
Cho, Sung-Yoo, Kyonggi-Do, KOREA, REPUBLIC OF
Hwang, Yu-Kyeong, Kyonggi-Do, KOREA, REPUBLIC OF
Choi, Myeong-Jun, Kyonggi-Do, KOREA, REPUBLIC OF
Cheong, Hong-Seok, Kyonggi-Do, KOREA, REPUBLIC OF
PATENT ASSIGNEE(S): Mogam Biotechnology Research Institute (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002151683	A1	20021017
APPLICATION INFO.:	US 2001-989621	A1	20011120 (9)

Applicant

RELATED APPLN. INFO.: Division of Ser. No. US 1998-51006, filed on 30 Mar 1998, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DARBY & DARBY P.C., 805 Third Avenue, New York, NY, 10022
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 589
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 2 OF 3 USPATFULL on STN
TI Liposomes comprising peptide antigens derived from **X protein** of **hepatitis B virus**
AB The present invention relates to liposomes comprising novel peptide antigens which play a role in regulating human immunity against **hepatitis B virus**, more specifically, to peptide groups corresponding to epitopes of antigens derived from **X protein** of HBV which induce cytotoxic T lymphocytes against the virus or immunological tolerance to the virus, and pH-sensitive liposomes comprising said peptide groups to induce cellular immunity so that CTLs specific to the virus can be produced. Since peptide antigens derived from **X protein** such as X3, X4, X5, X6 and X7 activate CTL which can recognize HBV antigens present in human body, and can also be recognized by the CTL, the liposomes can be used for the development of proposed therapeutic agents for the prevention and treatment of HBV-associated diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:95931 USPATFULL
TITLE: Liposomes comprising peptide antigens derived from **X protein** of **hepatitis B virus**
INVENTOR(S): Kim, Tae-Yeon, Kyonggi-Do, KOREA, REPUBLIC OF
Lee, Ki-Young, Kyonggi-Do, KOREA, REPUBLIC OF
Chang, Jin-Soo, Seoul, KOREA, REPUBLIC OF
Cho, Sung-Yoo, Kyonggi-Do, KOREA, REPUBLIC OF
Hwang, Yu-Kyeong, Kyonggi-Do, KOREA, REPUBLIC OF
Choi, Myeong-Jun, Kyonggi-Do, KOREA, REPUBLIC OF

	Cheong, Hong-Seok, Kyonggi-Do, KOREA, REPUBLIC OF
PATENT ASSIGNEE(S):	Mogam Biotechnology Research Institute, Kyonggi-Do, KOREA, REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6380359	B1	20020430	
	WO 9936434		19990722	
APPLICATION INFO.:	US 1998-51006		19980330	(9)
	WO 1998-KR10		19980119	
			19980330	PCT 371 date

Applicant

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1998-KR10	19980119

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Carlson, Karen Cochrane
ASSISTANT EXAMINER:	Robinson, Hope A.
LEGAL REPRESENTATIVE:	Darby & Darby
NUMBER OF CLAIMS:	2
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT:	531

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 3 OF 3 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

TI **Hepatitis B virus** protein X-derived peptide antigens used to stimulate cytotoxic T lymphocytes, useful for treatment of HBV-associated diseases, especially liver cancer.

AN 1999-444387 [37] WPIDS

AB WO 9936434 A UPAB: 20011203

NOVELTY - Peptide antigens (I to V) derived from **X protein** of **hepatitis B virus** (HBV) recognized by cytotoxic T lymphocytes (CTL) are new.

DETAILED DESCRIPTION - Peptide antigens (I to V) derived from **X protein** of HBV recognized by CTL to show cytotoxicity against HBV have the following sequences:

HLSLRGLFV (I);
VHLKRTLGL (II);
AMSTTDLEA (III);
CLFKDWEEL (IV);
EIRLKVFVL (V).

An INDEPENDENT CLAIM is also included for a **pH-sensitive liposome** comprising peptide antigens, which is prepared by mixing phospholipid and one or more peptides derived from HBV **X protein** as above in a molar ratio of 5:1 to 25:1.

ACTIVITY - Cytotoxic; Immunoprotective; Cytostatic; Antiviral.

MECHANISM OF ACTION - Hepatitis B Viral Antigens.

USE - The peptide antigens derived from HBV **X protein** are useful for inducing CTLs against the virus or inducing immunological tolerance to the virus. pH-sensitive liposomes containing the peptide antigens are used to induce cellular immunity so that CTLs specific to the virus can be produced. This is useful for prevention and treatment of HBV-associated diseases, especially HBV-associated liver cancer.

ADVANTAGE - pH-sensitive liposomes permit the selective transportation of anti-cancer drugs.

Dwg.0/3

ACCESSION NUMBER:	1999-444387 [37] WPIDS
DOC. NO. CPI:	C1999-130924
TITLE:	**Hepatitis B virus** protein X-derived peptide antigens used to stimulate cytotoxic T lymphocytes, useful for treatment of HBV-associated

diseases, especially liver cancer.
DERWENT CLASS: B04 B05 D16
INVENTOR(S): CHANG, J; CHEONG, H; CHO, S; CHOI, M; HWANG, Y; KIM, T; LEE, K
PATENT ASSIGNEE(S): (MOGA-N) MOGAM BIOTECHNOLOGY RES INST
COUNTRY COUNT: 23
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9936434	A1	19990722	(199937)*	EN	33
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
W: AU CA CN JP RU US					
AU 9856815	A	19990802	(199954)		
EP 1049711	A1	20001108	(200062)	EN	
R: DE					
CN 1286696	A	20010307	(200140)		
US 6380359	B1	20020430	(200235)		
JP 2002509157	W	20020326	(200236)		30
US 2002151683	A1	20021017	(200275)#		
RU 2189989	C2	20020927	(200278)		

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
WO 9936434	A1		WO 1998-KR10	19980119
AU 9856815	A		AU 1998-56815	19980119
			WO 1998-KR10	19980119
EP 1049711	A1		EP 1998-901120	19980119
			WO 1998-KR10	19980119
CN 1286696	A		CN 1998-813201	19980119
			WO 1998-KR10	19980119
US 6380359	B1		WO 1998-KR10	19980119
			US 1998-51006	19980330
JP 2002509157	W		WO 1998-KR10	19980119
			JP 2000-540149	19980119
US 2002151683	A1	Div ex	US 1998-51006	19980330
			US 2001-989621	20011120
RU 2189989	C2		WO 1998-KR10	19980119
			RU 2000-121960	19980119

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9856815	A	Based on	WO 9936434
EP 1049711	A1	Based on	WO 9936434
US 6380359	B1	Based on	WO 9936434
JP 2002509157	W	Based on	WO 9936434
RU 2189989	C2	Based on	WO 9936434

PRIORITY APPLN. INFO: WO 1998-KR10 19980119; US 2001-989621 20011120

=> d his

(FILE 'HOME' ENTERED AT 15:59:39 ON 30 DEC 2003)

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, FSTA, JICST-EPLUS' ENTERED AT 16:00:05 ON 30 DEC 2003
L1 76 S PH-SENSITIVE LIPOSOME
L2 0 S HEPATISTIS B VIRUS

```
L3          4979 S X-PROTEIN
L4         89876 S HEPATITIS B VIRUS
L5          1118 S L4 AND L3
L6             3 S L5 AND L1

=> sCHOH
SCHOH IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s CHOH
L7        10893 CHOH

=> s POPE
L8         2297 POPE

=> s l7 and l8
L9           11 L7 AND L8

=> d l9 ti abs ibib tot

L9   ANSWER 1 OF 11     MEDLINE on STN
TI   Immunogenicity of synthetic HIV-1 V3 loop peptides by MPL adjuvanted
     pH-sensitive liposomes.
AB   A successful HIV-1 vaccine should be capable of generating humoral and
     cellular immune responses at the same time. The only response shown to be
     effective in this regard is virus-neutralization antibodies and
     virus-specific cytotoxic T-lymphocytes (CTL) directed against the viral
     antigens. In the present study, it is shown that V3 peptides encapsulated
     pH-sensitive liposomes elicit the virus neutralization antibodies and
     virus specific CTL response at the same time in Balb/c mice. None of the
     immunization protocols elicited an antibody response and CTL response when
     R15K and T26K was used as immunogen without liposomes. In contrast,
     antibodies and CTL response were detectable in the mice which were
     immunized with peptide encapsulated pH-sensitive liposomes. Antibody
     production was confirmed by virus neutralizing assay. CD4+ T-cells are
     involved in target cell lysis to some degree but CTL activity is mainly
     due to the CD8 + T-cells. The consistency of the antibody and CTL
     response was related to the V3 loop peptides size. The T26K (26mer)
     peptide induced a stronger antibody and CTL response than R15K (15mer) in
     vivo. Based on the results of this study, T26K was used as a potentially
     effective HIV-1 vaccine component and T26K encapsulated pH-sensitive
     liposomes composed of phosphatidylethanolamine-beta-oleoyl-gamma-palmitoyl
     (POPE)/cholesterol hemisuccinate (CHOH)/monophosphoryl
     lipid A (MPL) (7:3:0.1, mole ratio) may be used as a potentially
     immunomodulating adjuvant system for the development of HIV and other
     viral vaccines.
ACCESSION NUMBER:   1999210166     MEDLINE
DOCUMENT NUMBER:    99210166   PubMed ID: 10195791
TITLE:              Immunogenicity of synthetic HIV-1 V3 loop peptides by MPL
                    adjuvanted pH-sensitive liposomes.
AUTHOR:             Chang J S; Choi M J; Kim T Y; Cho S Y; Cheong H S
CORPORATE SOURCE:   Drug Delivery Research Laboratory, Mogam Biotechnology
                    Research Institute, Yongin city, Kyonggi-do, South Korea.
SOURCE:             VACCINE, (1999 Mar 17) 17 (11-12) 1540-8.
                    Journal code: 8406899. ISSN: 0264-410X.
PUB. COUNTRY:       ENGLAND: United Kingdom
DOCUMENT TYPE:      Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals; AIDS
ENTRY MONTH:        199906
ENTRY DATE:         Entered STN: 19990618
                    Last Updated on STN: 19990618
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Entered Medline: 19990608

L9 ANSWER 2 OF 11 USPATFULL on STN
TI Lipid derivatives of polythiourea
AB The present invention relates to novel compounds which make it possible to transfer nucleic acids into cells. These novel compounds are lipid derivatives of polythiourea. They are useful for the in vitro, ex vivo or in vivo transfection of nucleic acids into various cell types.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:93672 USPATFULL		
TITLE:	Lipid derivatives of polythiourea		
INVENTOR(S):	Herscovici, Jean, Paris, FRANCE Scherman, Daniel, Paris, FRANCE Tranchant, Isabelle, Paris, FRANCE Mignet, Nathalie, Paris, FRANCE Girard, Christian, Paris, FRANCE		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003065033	A1	20030403
APPLICATION INFO.:	US 2002-143751	A1	20020514 (10)
	NUMBER		DATE
PRIORITY INFORMATION:	FR 2001-6330		20010514
	US 2001-297482P		20010613 (60)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Finnegan, Henderson, Farabow,, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC, 20005-3315		
NUMBER OF CLAIMS:	58		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	12 Drawing Page(s)		
LINE COUNT:	2154		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 3 OF 11 USPATFULL on STN
TI Liposomes comprising peptide antigens derived from X protein of hepatitis B virus
AB The present invention relates to liposomes comprising novel peptide antigens which play a role in regulating human immunity against hepatitis B virus, more specifically, to peptide groups corresponding to epitopes of antigens derived from X protein of HBV which induce cycotoxic T lymphocytes against the virus or immunological tolerance to the virus, and pH-sensitive liposomes comprising said peptide groups to induce cellular immunity so that CTLs specific to the virus can be produced. Since peptide antigens derived from X protein such as X3, X4, X5, X6 and X7 activate CTL which can recognize HBV antigens present in human body, and can also be recognized by the CTL, the said liposomes can be used for the development of proposed therapeutic agents for the prevention and treatment of HBV-associated diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:273552 USPATFULL
TITLE:	Liposomes comprising peptide antigens derived from X protein of hepatitis B virus
INVENTOR(S):	Kim, Tae-Yeon, Kyonggi-Do, KOREA, REPUBLIC OF Lee, Ki-Young, Kyonggi-Do, KOREA, REPUBLIC OF Chang, Jin-Soo, Seoul, KOREA, REPUBLIC OF Cho, Sung-Yoo, Kyonggi-Do, KOREA, REPUBLIC OF Hwang, Yu-Kyeong, Kyonggi-Do, KOREA, REPUBLIC OF Choi, Myeong-Jun, Kyonggi-Do, KOREA, REPUBLIC OF Cheong, Hong-Seok, Kyonggi-Do, KOREA, REPUBLIC OF

PATENT ASSIGNEE(S): Mogam Biotechnology Research Institute (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002151683	A1	20021017
APPLICATION INFO.:	US 2001-989621	A1	20011120 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-51006, filed on 30 Mar 1998, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DARBY & DARBY P.C., 805 Third Avenue, New York, NY, 10022
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 589
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 4 OF 11 USPATFULL on STN
TI Liposomes comprising peptide antigens derived from X protein of hepatitis B virus
AB The present invention relates to liposomes comprising novel peptide antigens which play a role in regulating human immunity against hepatitis B virus, more specifically, to peptide groups corresponding to epitopes of antigens derived from X protein of HBV which induce cytotoxic T lymphocytes against the virus or immunological tolerance to the virus, and pH-sensitive liposomes comprising said peptide groups to induce cellular immunity so that CTLs specific to the virus can be produced. Since peptide antigens derived from X protein such as X3, X4, X5, X6 and X7 activate CTL which can recognize HBV antigens present in human body, and can also be recognized by the CTL, the liposomes can be used for the development of proposed therapeutic agents for the prevention and treatment of HBV-associated diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:95931 USPATFULL
TITLE: Liposomes comprising peptide antigens derived from X protein of hepatitis B virus
INVENTOR(S): Kim, Tae-Yeon, Kyonggi-Do, KOREA, REPUBLIC OF
Lee, Ki-Young, Kyonggi-Do, KOREA, REPUBLIC OF
Chang, Jin-Soo, Seoul, KOREA, REPUBLIC OF
Cho, Sung-Yoo, Kyonggi-Do, KOREA, REPUBLIC OF
Hwang, Yu-Kyeong, Kyonggi-Do, KOREA, REPUBLIC OF
Choi, Myeong-Jun, Kyonggi-Do, KOREA, REPUBLIC OF
Cheong, Hong-Seok, Kyonggi-Do, KOREA, REPUBLIC OF
PATENT ASSIGNEE(S): Mogam Biotechnology Research Institute, Kyonggi-Do, KOREA, REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6380359	B1	20020430	
	WO 9936434		19990722	
APPLICATION INFO.:	US 1998-51006		19980330	(9)
	WO 1998-KR10		19980119	
			19980330	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1998-KR10	19980119

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Carlson, Karen Cochrane
ASSISTANT EXAMINER: Robinson, Hope A.

LEGAL REPRESENTATIVE: Darby & Darby
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 531
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 5 OF 11 USPATFULL on STN
TI Multinuclear complexes for X-ray imaging
AB An x-ray contrast medium containing a multinuclear complex of the formula (M.sub.6 (.mu..sub.3 B).sub.8 A.sub.v).sub.x L.sub.w, wherein M is Mo, W, Re Tc, V, Nb, Ta, Ru, or Fe; .mu..sub.3 B represent a tridentate bridging atom; A is a non-bridging atom; L is a ligand coordinately bonded to at least one M atom; x is a positive integer; and v and w are independently zero or positive integers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 1999:88769 USPATFULL
TITLE: Multinuclear complexes for X-ray imaging
INVENTOR(S): Almen, Torsten, Falsterbo, Sweden
Berg, Arne, Blommenholm, Norway
Droege, Michael, Livermore, CA, United States
Dugstad, Harald, Olso, Norway
Fellman, Jere D., Livermore, CA, United States
Kim, Sook-Hui, Milwaukee, WI, United States
Klaveness, Jo, Olso, Norway
Rocklage, Scott M., Lincoln, MA, United States
Rongved, Pal, Nesoddtangen, Norway
Segal, Brent, Somerville, MA, United States
Watson, Alan D., Los Altos, CA, United States
PATENT ASSIGNEE(S): Nycomed Salutar, Inc., Wayne, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5932190		19990803
APPLICATION INFO.:	US 1995-473574		19950607 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 122461		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1991-6579	19910327
	GB 1991-20507	19910926

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Hollinden, Gary E.
LEGAL REPRESENTATIVE: Fish & Richardson P.C.
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 2485
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 6 OF 11 USPATFULL on STN
TI Methods of treating neurological diseases and etiologically related symptomology using carbonyl trapping agents in combination with previously known medicaments
AB Therapeutic compositions comprising an effective amount of at least one carbonyl trapping agent alone or in combination with a therapeutically effective of a co-agent or medicament are disclosed. The compositions are used to treat a mammal suffering from a neurological disease characterized by covalent bond crosslinking between the nerve cells, other cellular structures and their intracellular and extracellular components, with disease induced carbonyl-containing aliphatic or aromatic hydrocarbons present in mammals.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 97:83944 USPATFULL

TITLE: Methods of treating neurological diseases and etiologically related symptomology using carbonyl trapping agents in combination with previously known medicaments

INVENTOR(S): Shapiro, Howard K., 214 Price Ave. F32, Narberth, PA, United States 19072

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5668117		19970916	
APPLICATION INFO.:	US 1993-62201		19930629	(8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1993-26617, filed on 23 Feb 1993, now abandoned which is a continuation of Ser. No. US 1991-660561, filed on 22 Feb 1991, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Kight, John

ASSISTANT EXAMINER: Leary, Louise

LEGAL REPRESENTATIVE: Perrella, D. J.

NUMBER OF CLAIMS: 29

EXEMPLARY CLAIM: 1

LINE COUNT: 3963

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 7 OF 11 USPATFULL on STN

TI Multinuclear complexes for x-ray imaging

AB An imaging contrast medium comprising a physiologically tolerable multinuclear complex (as defined in claim 1) is disclosed. The multinuclear complex contains at least two, but preferably three or more contrast enhancing atoms. For X-ray or ultrasound imaging techniques heavy metal atoms are used to enhance contrast, whereas in Magnetic Resonance Imaging paramagnetic metal atoms are contrast enhancing. Molybdenum and tungsten are preferred contrast enhancing atoms. The medium may also be used therapeutically.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 96:3497 USPATFULL

TITLE: Multinuclear complexes for x-ray imaging

INVENTOR(S): Almen, Torsten, Malmo, Sweden
Berg, Arne, Blommenholm, Norway
Chang, C. Allen, Palo Alto, CA, United States
Droege, Michael, Livermore, CA, United States
Dugstad, Harald, Oslo, Norway
Fellman, Jere D., Livermore, CA, United States
Kim, Sook-Hui, Mountain View, CA, United States
Klaveness, Jo, Oslo, Norway
Rocklage, Scott M., Los Gatos, CA, United States
Rongved, Pal, Hellvik, Norway
Segal, Brent, Sunnyvale, CA, United States
Watson, Alan D., Campbell, CA, United States

PATENT ASSIGNEE(S): Nycomed Salutar Inc., Sunnyvale, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5482699		19960109	
	WO 9217215		19921015	
APPLICATION INFO.:	US 1993-122461		19930924	(8)
	WO 1992-EP698		19920327	
			19930924	PCT 371 date

19931124 PCT 102(e) date

DISCLAIMER DATE: 20121017

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1991-6579	19910327
	GB 1991-20507	19910926

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Hollinden, Gary E.
LEGAL REPRESENTATIVE: Fish & Richardson
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
LINE COUNT: 2375
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 8 OF 11 USPATFULL on STN
TI Carbonylation reaction catalysts
AB A process and novel catalyst for the carbonylation of one or more of alcohols, ethers and ether alcohols to esters and, optionally, to carboxylic acids. The reaction is effected in the vapor state over a solid catalyst comprising a polyoxometalate anion in which the metal is at least one taken from Group V and VI of the Periodic Chart of the Elements complexed with a cation from a member of Group VIIIA of the Periodic Chart of the Elements. Preferably, the catalyst is deposited on a support that is inert to the reaction. The preferred support is silica.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 94:62417 USPATFULL
TITLE: Carbonylation reaction catalysts
INVENTOR(S): Wegman, Richard W., South Charleston, WV, United States
PATENT ASSIGNEE(S): Union Carbide Chemicals & Plastics Technology Corporation, Danbury, CT, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5330955		19940719
APPLICATION INFO.:	US 1993-32509		19930317 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1988-227295, filed on 2 Aug 1988, now patented, Pat. No. US 5218140
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Konopka, Paul E.
LEGAL REPRESENTATIVE: Finnegan, R. J.
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
LINE COUNT: 604
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 9 OF 11 USPATFULL on STN
TI Carbonylation reaction and catalyst therefor
AB A process and novel catalyst for the carbonylation of one or more of alcohols, ethers and ether alcohols to esters and, optionally, to carboxylic acids. The reaction is effected in the vapor state over a solid catalyst comprising a polyoxometalate anion in which the metal is at least one taken from Group V and VI of the Periodic Chart of the Elements complexed with a cation from a member of Group VIIIA of the Periodic Chart of the Elements. Preferably, the catalyst is deposited on a support that is inert to the reaction. The preferred support is silica.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 93:46585 USPATFULL
TITLE: Carbonylation reaction and catalyst therefor
INVENTOR(S): Wegman, Richard W., South Charleston, WV, United States
PATENT ASSIGNEE(S): Union Carbide Chemicals & Plastics Technology Corporation, Danbury, CT, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5218140		19930608	
APPLICATION INFO.:	US 1988-227295		19880802	(7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Dees, Jose G.
ASSISTANT EXAMINER: Jones, Dwayne C.
LEGAL REPRESENTATIVE: Hegedus, S. H.
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 585
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 10 OF 11 USPATFULL on STN
TI N-cyanoimides
AB Polyfunctional N-cyanoimides and their precursors and derivatives are disclosed along with methods for their preparation and interconversion. Also disclosed are curable compositions comprising the N-cyanoimides or poly(amide-cyanoamides) and reactive diluents as well as novel dianhydrides, polyimides, and poly(amide-cyanoamides) and methods for making them.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 93:44407 USPATFULL
TITLE: N-cyanoimides
INVENTOR(S): Stephens, Randall, Sebastopol, CA, United States
Domeier, Linda A., Windsor, CA, United States
PATENT ASSIGNEE(S): Henkel Research Corporation, Santa Rosa, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5216173		19930601	
APPLICATION INFO.:	US 1990-558028		19900723	(7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1989-385135, filed on 25 Jul 1989, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Springer, David B.
LEGAL REPRESENTATIVE: Jaeschke, Wayne C., Drach, John E., Millson, Jr., Henry E.
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
LINE COUNT: 2123
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 11 OF 11 EMBASE on STN
TI Immunogenicity of synthetic HIV-1 V3 loop peptides by MPL adjuvanted pH-sensitive liposomes.
AB A successful HIV-1 vaccine should be capable of generating humoral and cellular immune responses at the same time. The only response shown to be effective in this regard is virus-neutralization antibodies and virus-specific cytotoxic T-lymphocytes (CTL) directed against the viral antigens. In the present study, it is shown that V3 peptides encapsulated pH-sensitive liposomes elicit the virus neutralization antibodies and

virus specific CTL response at the same time in Balb/c mice. None of the immunization protocols elicited an antibody response and CTL response when R15K and T26K was used as immunogen without liposomes. In contrast, antibodies and CTL response were detectable in the mice which were immunized with peptide encapsulated pH- sensitive liposomes. Antibody production was confirmed by virus neutralizing assay. CD4+ T-cells are involved in target cell lysis to some degree but CTL activity is mainly due to the CD8 + T-cells. The consistency of the antibody and CTL response was related to the V3 loop peptides size. The T26K (26mer) peptide induced a stronger antibody and CTL response than R15K (15mer) in vivo. Based on the results of this study, T26K was used as a potentially effective HIV-1 vaccine component and T26K encapsulated pH-sensitive liposomes composed of phosphatidylethanolamine-.beta.-oleoyl-.gamma.-palmitoyl (**POPE**)/cholesterol hemisuccinate (**CHOH**)/monophosphoryl lipid A (MPL) (7:3:0.1, mole ratio) may be used as a potentially immunomodulating adjuvant system for the development of HIV and other viral vaccines.

ACCESSION NUMBER: 1999106894 EMBASE
TITLE: Immunogenicity of synthetic HIV-1 V3 loop peptides by MPL adjuvanted pH- sensitive liposomes.
AUTHOR: Chang J.-S.; Choi M.-J.; Kim T.-Y.; Sung Yoo Cho; Cheong H.-S.
CORPORATE SOURCE: M.-J. Choi, Drug Delivery Research Laboratory, Mogam Biotechnol. Research Institute, 341 Pojung-ri, Koosung-myon, Yongin City, Kyonggi-do 449-910, Korea, Republic of. rchung@kgcc.co.kr
SOURCE: Vaccine, (17 Mar 1999) 17/11-12 (1540-1548).
Refs: 31
ISSN: 0264-410X CODEN: VACCDE
PUBLISHER IDENT.: S 0264-410X(98)00353-3
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 026 Immunology, Serology and Transplantation
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

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(FILE 'HOME' ENTERED AT 15:59:39 ON 30 DEC 2003)

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, FSTA, JICST-EPLUS'
ENTERED AT 16:00:05 ON 30 DEC 2003
L1 76 S PH-SENSITIVE LIPOSOME
L2 0 S HEPATISTIS B VIRUS
L3 4979 S X-PROTEIN
L4 89876 S HEPATITIS B VIRUS
L5 1118 S L4 AND L3
L6 3 S L5 AND L1
L7 10893 S CHOH
L8 2297 S POPE
L9 11 S L7 AND L8

=> s l7 and l5
L10 2 L7 AND L5

=> d l10 ti abs ibib tot

L10 ANSWER 1 OF 2 USPATFULL on STN
TI Liposomes comprising peptide antigens derived from **X protein** of **hepatitis B virus**
AB The present invention relates to liposomes comprising novel peptide antigens which play a role in regulating human immunity against

hepatitis B virus, more specifically, to peptide groups corresponding to epitopes of antigens derived from **X protein** of HBV which induce cycotoxic T lymphocytes against the virus or immunological tolerance to the virus, and pH-sensitive liposomes comprising said peptide groups to induce cellular immunity so that CTLs specific to the virus can be produced. Since peptide antigens derived from **X protein** such as X3, X4, X5, X6 and X7 activate CTL which can recognize HBV antigens present in human body, and can also be recognized by the CTL, the said liposomes can be used for the development of proposed therapeutic agents for the prevention and treatment of HBV-associated diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:273552 USPATFULL
TITLE:	Liposomes comprising peptide antigens derived from **X protein** of **hepatitis B virus**
INVENTOR(S):	Kim, Tae-Yeon, Kyonggi-Do, KOREA, REPUBLIC OF Lee, Ki-Young, Kyonggi-Do, KOREA, REPUBLIC OF Chang, Jin-Soo, Seoul, KOREA, REPUBLIC OF Cho, Sung-Yoo, Kyonggi-Do, KOREA, REPUBLIC OF Hwang, Yu-Kyeong, Kyonggi-Do, KOREA, REPUBLIC OF Choi, Myeong-Jun, Kyonggi-Do, KOREA, REPUBLIC OF Cheong, Hong-Seok, Kyonggi-Do, KOREA, REPUBLIC OF
PATENT ASSIGNEE(S):	Mogam Biotechnology Research Institute (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002151683	A1	20021017
APPLICATION INFO.:	US 2001-989621	A1	20011120 (9)

RELATED APPLN. INFO.:	Division of Ser. No. US 1998-51006, filed on 30 Mar 1998, PENDING
DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	DARBY & DARBY P.C., 805 Third Avenue, New York, NY, 10022
NUMBER OF CLAIMS:	12
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	3 Drawing Page(s)
LINE COUNT:	589

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 2 OF 2 USPATFULL on STN

TI Liposomes comprising peptide antigens derived from **X protein** of **hepatitis B virus**

AB The present invention relates to liposomes comprising novel peptide antigens which play a role in regulating human immunity against **hepatitis B virus**, more specifically, to peptide groups corresponding to epitopes of antigens derived from **X protein** of HBV which induce cytotoxic T lymphocytes against the virus or immunological tolerance to the virus, and pH-sensitive liposomes comprising said peptide groups to induce cellular immunity so that CTLs specific to the virus can be produced. Since peptide antigens derived from **X protein** such as X3, X4, X5, X6 and X7 activate CTL which can recognize HBV antigens present in human body, and can also be recognized by the CTL, the liposomes can be used for the development of proposed therapeutic agents for the prevention and treatment of HBV-associated diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:95931 USPATFULL
TITLE:	Liposomes comprising peptide antigens derived from **X protein** of **hepatitis**

B virus

INVENTOR(S): Kim, Tae-Yeon, Kyonggi-Do, KOREA, REPUBLIC OF
Lee, Ki-Young, Kyonggi-Do, KOREA, REPUBLIC OF
Chang, Jin-Soo, Seoul, KOREA, REPUBLIC OF
Cho, Sung-Yoo, Kyonggi-Do, KOREA, REPUBLIC OF
Hwang, Yu-Kyeong, Kyonggi-Do, KOREA, REPUBLIC OF
Choi, Myeong-Jun, Kyonggi-Do, KOREA, REPUBLIC OF
Cheong, Hong-Seok, Kyonggi-Do, KOREA, REPUBLIC OF

PATENT ASSIGNEE(S): Mogam Biotechnology Research Institute, Kyonggi-Do, KOREA, REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6380359	B1	20020430	
	WO 9936434		19990722	
APPLICATION INFO.:	US 1998-51006		19980330	(9)
	WO 1998-KR10		19980119	
			19980330	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1998-KR10	19980119

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Carlson, Karen Cochrane
ASSISTANT EXAMINER: Robinson, Hope A.
LEGAL REPRESENTATIVE: Darby & Darby
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 531
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, FSTA, JICST-EPLUS'
ENTERED AT 16:00:05 ON 30 DEC 2003

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L1          76 S PH-SENSITIVE LIPOSOME
L2           0 S HEPATISTIS B VIRUS
L3        4979 S X-PROTEIN
L4       89876 S HEPATITIS B VIRUS
L5        1118 S L4 AND L3
L6           3 S L5 AND L1
L7       10893 S CHOH
L8        2297 S POPE
L9          11 S L7 AND L8
L10          2 S L7 AND L5
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=> s l8 and l5
L11 2 L8 AND L5

=> d l11 ti abs ibib tot

L11 ANSWER 1 OF 2 USPATFULL on STN

TI Liposomes comprising peptide antigens derived from **X protein** of **hepatitis B virus**

AB The present invention relates to liposomes comprising novel peptide antigens which play a role in regulating human immunity against **hepatitis B virus**, more specifically, to peptide groups corresponding to epitopes of antigens derived from **X protein** of HBV which induce cycotoxic T lymphocytes

against the virus or immunological tolerance to the virus, and pH-sensitive liposomes comprising said peptide groups to induce cellular immunity so that CTLs specific to the virus can be produced. Since peptide antigens derived from **X protein** such as X3, X4, X5, X6 and X7 activate CTL which can recognize HBV antigens present in human body, and can also be recognized by the CTL, the said liposomes can be used for the development of proposed therapeutic agents for the prevention and treatment of HBV-associated diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:273552 USPATFULL
TITLE:	Liposomes comprising peptide antigens derived from **X protein** of **hepatitis B virus**
INVENTOR(S):	Kim, Tae-Yeon, Kyonggi-Do, KOREA, REPUBLIC OF Lee, Ki-Young, Kyonggi-Do, KOREA, REPUBLIC OF Chang, Jin-Soo, Seoul, KOREA, REPUBLIC OF Cho, Sung-Yoo, Kyonggi-Do, KOREA, REPUBLIC OF Hwang, Yu-Kyeong, Kyonggi-Do, KOREA, REPUBLIC OF Choi, Myeong-Jun, Kyonggi-Do, KOREA, REPUBLIC OF Cheong, Hong-Seok, Kyonggi-Do, KOREA, REPUBLIC OF
PATENT ASSIGNEE(S):	Mogam Biotechnology Research Institute (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002151683	A1	20021017
APPLICATION INFO.:	US 2001-989621	A1	20011120 (9)

RELATED APPLN. INFO.:	Division of Ser. No. US 1998-51006, filed on 30 Mar 1998, PENDING
DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	DARBY & DARBY P.C., 805 Third Avenue, New York, NY, 10022
NUMBER OF CLAIMS:	12
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	3 Drawing Page(s)
LINE COUNT:	589

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 2 OF 2 USPATFULL on STN

TI Liposomes comprising peptide antigens derived from **X protein** of **hepatitis B virus**

AB The present invention relates to liposomes comprising novel peptide antigens which play a role in regulating human immunity against **hepatitis B virus**, more specifically, to peptide groups corresponding to epitopes of antigens derived from **X protein** of HBV which induce cytotoxic T lymphocytes against the virus or immunological tolerance to the virus, and pH-sensitive liposomes comprising said peptide groups to induce cellular immunity so that CTLs specific to the virus can be produced. Since peptide antigens derived from **X protein** such as X3, X4, X5, X6 and X7 activate CTL which can recognize HBV antigens present in human body, and can also be recognized by the CTL, the liposomes can be used for the development of proposed therapeutic agents for the prevention and treatment of HBV-associated diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:95931 USPATFULL
TITLE:	Liposomes comprising peptide antigens derived from **X protein** of **hepatitis B virus**
INVENTOR(S):	Kim, Tae-Yeon, Kyonggi-Do, KOREA, REPUBLIC OF Lee, Ki-Young, Kyonggi-Do, KOREA, REPUBLIC OF

	Chang, Jin-Soo, Seoul, KOREA, REPUBLIC OF Cho, Sung-Yoo, Kyonggi-Do, KOREA, REPUBLIC OF Hwang, Yu-Kyeong, Kyonggi-Do, KOREA, REPUBLIC OF Choi, Myeong-Jun, Kyonggi-Do, KOREA, REPUBLIC OF Cheong, Hong-Seok, Kyonggi-Do, KOREA, REPUBLIC OF			
PATENT ASSIGNEE(S):	Mogam Biotechnology Research Institute, Kyonggi-Do, KOREA, REPUBLIC OF (non-U.S. corporation)			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6380359	B1	20020430	
	WO 9936434		19990722	
APPLICATION INFO.:	US 1998-51006		19980330	(9)
	WO 1998-KR10		19980119	
			19980330	PCT 371 date
	NUMBER		DATE	
PRIORITY INFORMATION:	WO 1998-KR10		19980119	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	GRANTED			
PRIMARY EXAMINER:	Carlson, Karen Cochrane			
ASSISTANT EXAMINER:	Robinson, Hope A.			
LEGAL REPRESENTATIVE:	Darby & Darby			
NUMBER OF CLAIMS:	2			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 3 Drawing Page(s)			
LINE COUNT:	531			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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     (FILE 'HOME' ENTERED AT 15:59:39 ON 30 DEC 2003)

     FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, FSTA, JICST-EPLUS'
     ENTERED AT 16:00:05 ON 30 DEC 2003
L1            76 S PH-SENSITIVE LIPOSOME
L2             0 S HEPATISTIS B VIRUS
L3          4979 S X-PROTEIN
L4         89876 S HEPATITIS B VIRUS
L5          1118 S L4 AND L3
L6             3 S L5 AND L1
L7         10893 S CHOH
L8          2297 S POPE
L9            11 S L7 AND L8
L10            2 S L7 AND L5
L11            2 S L8 AND L5

=> s l8 and l1
L12            2 L8 AND L1

=> s l7 and l1
L13            2 L7 AND L1

=> s l12 and l13
L14            2 L12 AND L13

=> s l11 and l14
L15            2 L11 AND L14

=> s l1 and peptide
L16           26 L1 AND PEPTIDE
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=> s l16 and l3
L17 3 L16 AND L3

=> d l17 ti abs ibib tot

L17 ANSWER 1 OF 3 USPATFULL on STN
TI Liposomes comprising **peptide** antigens derived from **X** **protein** of hepatitis B virus
AB The present invention relates to liposomes comprising novel **peptide** antigens which play a role in regulating human immunity against hepatitis B virus, more specifically, to **peptide** groups corresponding to epitopes of antigens derived from **X** **protein** of HBV which induce cycotoxic T lymphocytes against the virus or immunological tolerance to the virus, and pH-sensitive liposomes comprising said **peptide** groups to induce cellular immunity so that CTLs specific to the virus can be produced. Since **peptide** antigens derived from **X protein** such as X3, X4, X5, X6 and X7 activate CTL which can recognize HBV antigens present in human body, and can also be recognized by the CTL, the said liposomes can be used for the development of proposed therapeutic agents for the prevention and treatment of HBV-associated diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:273552 USPATFULL
TITLE: Liposomes comprising **peptide** antigens derived from **X protein** of hepatitis B virus
INVENTOR(S): Kim, Tae-Yeon, Kyonggi-Do, KOREA, REPUBLIC OF
Lee, Ki-Young, Kyonggi-Do, KOREA, REPUBLIC OF
Chang, Jin-Soo, Seoul, KOREA, REPUBLIC OF
Cho, Sung-Yoo, Kyonggi-Do, KOREA, REPUBLIC OF
Hwang, Yu-Kyeong, Kyonggi-Do, KOREA, REPUBLIC OF
Choi, Myeong-Jun, Kyonggi-Do, KOREA, REPUBLIC OF
Cheong, Hong-Seok, Kyonggi-Do, KOREA, REPUBLIC OF
PATENT ASSIGNEE(S): Mogam Biotechnology Research Institute (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002151683	A1	20021017
APPLICATION INFO.:	US 2001-989621	A1	20011120 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-51006, filed on 30 Mar 1998, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DARBY & DARBY P.C., 805 Third Avenue, New York, NY, 10022
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 589
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 2 OF 3 USPATFULL on STN
TI Liposomes comprising **peptide** antigens derived from **X** **protein** of hepatitis B virus
AB The present invention relates to liposomes comprising novel **peptide** antigens which play a role in regulating human immunity against hepatitis B virus, more specifically, to **peptide** groups corresponding to epitopes of antigens derived from **X** **protein** of HBV which induce cytotoxic T lymphocytes against the virus or immunological tolerance to the virus, and pH-sensitive liposomes comprising said **peptide** groups to induce cellular immunity so that CTLs specific to the virus can be produced. Since **peptide** antigens derived from **X protein** such

as X3, X4, X5, X6 and X7 activate CTL which can recognize HBV antigens present in human body, and can also be recognized by the CTL, the liposomes can be used for the development of proposed therapeutic agents for the prevention and treatment of HBV-associated diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:95931 USPATFULL			
TITLE:	Liposomes comprising **peptide** antigens derived from **X protein** of hepatitis B virus			
INVENTOR(S):	Kim, Tae-Yeon, Kyonggi-Do, KOREA, REPUBLIC OF Lee, Ki-Young, Kyonggi-Do, KOREA, REPUBLIC OF Chang, Jin-Soo, Seoul, KOREA, REPUBLIC OF Cho, Sung-Yoo, Kyonggi-Do, KOREA, REPUBLIC OF Hwang, Yu-Kyeong, Kyonggi-Do, KOREA, REPUBLIC OF Choi, Myeong-Jun, Kyonggi-Do, KOREA, REPUBLIC OF Cheong, Hong-Seok, Kyonggi-Do, KOREA, REPUBLIC OF			
PATENT ASSIGNEE(S):	Mogam Biotechnology Research Institute, Kyonggi-Do, KOREA, REPUBLIC OF (non-U.S. corporation)			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6380359	B1	20020430	
	WO 9936434		19990722	
APPLICATION INFO.:	US 1998-51006		19980330	(9)
	WO 1998-KR10		19980119	
			19980330	PCT 371 date
	NUMBER		DATE	
PRIORITY INFORMATION:	WO 1998-KR10		19980119	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	GRANTED			
PRIMARY EXAMINER:	Carlson, Karen Cochrane			
ASSISTANT EXAMINER:	Robinson, Hope A.			
LEGAL REPRESENTATIVE:	Darby & Darby			
NUMBER OF CLAIMS:	2			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 3 Drawing Page(s)			
LINE COUNT:	531			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 3 OF 3 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

TI Hepatitis B virus protein X-derived **peptide** antigens used to stimulate cytotoxic T lymphocytes, useful for treatment of HBV-associated diseases, especially liver cancer.

AN 1999-444387 [37] WPIDS

AB WO 9936434 A UPAB: 20011203

NOVELTY - **Peptide** antigens (I to V) derived from **X protein** of hepatitis B virus (HBV) recognized by cytotoxic T lymphocytes (CTL) are new.

DETAILED DESCRIPTION - **Peptide** antigens (I to V) derived from **X protein** of HBV recognized by CTL to show cytotoxicity against HBV have the following sequences:

HLSLRGLFV (I);

VHLKRTLGL (II);

AMSTTDLEA (III);

CLFKDWEEL (IV);

EIRLKVFVL (V).

An INDEPENDENT CLAIM is also included for a **pH-sensitive liposome** comprising **peptide** antigens, which is prepared by mixing phospholipid and one or more peptides derived from HBV **X protein** as above in a molar ratio of 5:1 to 25:1.

ACTIVITY - Cytotoxic; Immunoprotective; Cytostatic; Antiviral.

MECHANISM OF ACTION - Hepatitis B Viral Antigens.

USE - The **peptide** antigens derived from HBV **X protein** are useful for inducing CTLs against the virus or inducing immunological tolerance to the virus. pH-sensitive liposomes containing the **peptide** antigens are used to induce cellular immunity so that CTLs specific to the virus can be produced. This is useful for prevention and treatment of HBV-associated diseases, especially HBV-associated liver cancer.

ADVANTAGE - pH-sensitive liposomes permit the selective transportation of anti-cancer drugs.

Dwg.0/3

ACCESSION NUMBER: 1999-444387 [37] WPIDS
DOC. NO. CPI: C1999-130924
TITLE: Hepatitis B virus protein X-derived **peptide** antigens used to stimulate cytotoxic T lymphocytes, useful for treatment of HBV-associated diseases, especially liver cancer.
DERWENT CLASS: B04 B05 D16
INVENTOR(S): CHANG, J; CHEONG, H; CHO, S; CHOI, M; HWANG, Y; KIM, T; LEE, K
PATENT ASSIGNEE(S): (MOGA-N) MOGAM BIOTECHNOLOGY RES INST
COUNTRY COUNT: 23
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9936434	A1	19990722	(199937)*	EN	33
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
W: AU CA CN JP RU US					
AU 9856815	A	19990802	(199954)		
EP 1049711	A1	20001108	(200062)	EN	
R: DE					
CN 1286696	A	20010307	(200140)		
US 6380359	B1	20020430	(200235)		
JP 2002509157	W	20020326	(200236)		30
US 2002151683	A1	20021017	(200275)#		
RU 2189989	C2	20020927	(200278)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9936434	A1	WO 1998-KR10	19980119
AU 9856815	A	AU 1998-56815	19980119
		WO 1998-KR10	19980119
EP 1049711	A1	EP 1998-901120	19980119
		WO 1998-KR10	19980119
CN 1286696	A	CN 1998-813201	19980119
		WO 1998-KR10	19980119
US 6380359	B1	WO 1998-KR10	19980119
		US 1998-51006	19980330
JP 2002509157	W	WO 1998-KR10	19980119
		JP 2000-540149	19980119
US 2002151683	A1 Div ex	US 1998-51006	19980330
		US 2001-989621	20011120
RU 2189989	C2	WO 1998-KR10	19980119
		RU 2000-121960	19980119

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9856815	A	Based on	WO 9936434
EP 1049711	A1	Based on	WO 9936434

US 6380359	B1	Based on	WO 9936434
JP 2002509157	W	Based on	WO 9936434
RU 2189989	C2	Based on	WO 9936434

PRIORITY APPLN. INFO: WO 1998-KR10 19980119; US 2001-989621 20011120

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L16 ANSWER 1 OF 26 MEDLINE on STN

TI Pharmaco attributes of dioleoylphosphatidylethanolamine/cholesterylhemisuccinate liposomes containing different types of cleavable lipopolymers.

AB Various amounts of one of three different types of cleavable methoxy polyethylene glycol (mPEG)-phospholipids or of a non-cleavable counterpart (mPEG-DSPE) were included into **pH-sensitive liposome** formulations containing dioleoylphosphatidylethanolamine (DOPE) and cholesterylhemisuccinate (CHEMS) at a 6:4 molar ratio, and the effect on plasma clearance and contents release rates was determined. The cleavable lipopolymers were all based on a distearoylphosphatidyl lipid anchor, which was linked to mPEG via dithiodipropionateaminoethanol (mPEG-DTP-DSPE), dithio-3-hexanol (mPEG-DTH-DSPA), or Gly-Phe-Leu-Gly-aminoethanol (mPEG-GFLG-DSPE) linkers. In contrast to the first-generation thiolytically cleavable lipopolymer, mPEG-DTP-DSPE, the second generation conjugates contained a hindered disulfide or enzymatically cleavable tetrapeptide, respectively, as the points of scission. In the absence of mPEG-lipid, DOPE/CHEMS liposomes had rapid clearance half-lives. As the mol% of mPEG-lipid in the liposomes increased, the rate of clearance of DOPE/CHEMS liposomes in mice decreased. Zeta-potential measurements showed that decreased clearance was correlated with a decrease in the apparent surface charge of the liposomes, which approached neutrality as the content of mPEG-lipids increased to above 15mol%. At these levels, liposomes containing mPEG-DTP-DSPE were cleared from blood circulation faster than liposomes containing other, less vulnerable lipopolymers. Liposomes with the **peptide**-linked lipopolymer exhibited the slowest clearance. The presence of either cleavable or non-cleavable mPEG-lipids at concentrations of 5mol% or higher in the DOPE/CHEMS liposomes inhibited the release of doxorubicin from these liposomes in response to acid pH.

ACCESSION NUMBER:	2003571325 IN-PROCESS
DOCUMENT NUMBER:	PubMed ID: 14643699
TITLE:	Pharmaco attributes of dioleoylphosphatidylethanolamine/cholesterylhemisuccinate liposomes containing different types of cleavable lipopolymers.
AUTHOR:	Zhang Janny X; Zalipsky Samuel; Mullah Nasreen; Pechar Michal; Allen Theresa M
CORPORATE SOURCE:	Department of Pharmacology, University of Alberta, AB, T6G 2H7, Edmonton, Canada.
SOURCE:	Pharmacological research : official journal of the Italian Pharmacological Society, (2004 Feb) 49 (2) 185-98. Journal code: 8907422. ISSN: 1043-6618.
PUB. COUNTRY:	England: United Kingdom
DOCUMENT TYPE:	Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:	English
FILE SEGMENT:	IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE:	Entered STN: 20031216 Last Updated on STN: 20031216

L16 ANSWER 2 OF 26 MEDLINE on STN

TI Investigation of antigen delivery route in vivo and imune-boosting effects mediated by pH-sensitive liposomes encapsulated with K(b)-restricted CTL epitope.

AB Using fluorescein isothiocyanate (FITC)-conjugated H-2K(b) CTL epitope (SIINFEKL) as a model system, we investigated the antigen delivery route

by pH-sensitive liposomes in vivo. Fluorescence was initially detected in lymph nodes at 3 h after immunization, and its intensity reached a peak value in superticial inguinal lymph node at 9 h. No trace could be detected in spleen even with prolonged monitoring for up to 24 h. These results strongly suggest that the presentation of CTL-**peptide** antigen vehicled by pH-sensitive liposomes exclusively occurs in lymph nodes. In mice immunized with the H-2K(b) CTL epitope encapsulated pH-sensitive liposomes, **peptide**-specific CTL response was detected at day 3. The response was strongly augmented by the second immunization and persisted up to at least 45 days. These results suggest that **pH-sensitive liposome** formula functions as a potential adjuvant of **peptide** antigens and is useful for the induction of antigen specific CTLsv in vivo.

ACCESSION NUMBER: 2002189889 MEDLINE
DOCUMENT NUMBER: 21920352 PubMed ID: 11922620
TITLE: Investigation of antigen delivery route in vivo and imune-boosting effects mediated by pH-sensitive liposomes encapsulated with K(b)-restricted CTL epitope.
AUTHOR: Lee Ki-Young; Chun Eunyoung; Seong Baik L
CORPORATE SOURCE: Department of Biotechnology, College of Engineering and Bioproducts Research Center, Yonsei University, 134 Shinchon-Dong, Seodaemun-Gu, Seoul, 120-749, South Korea.
SOURCE: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (2002 Apr 5) 292 (3) 682-8.
Journal code: 0372516. ISSN: 0006-291X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200205
ENTRY DATE: Entered STN: 20020403
Last Updated on STN: 20020517
Entered Medline: 20020516

L16 ANSWER 3 OF 26 USPATFULL on STN
TI Liposome composition for improved intracellular delivery of a therapeutic agent
AB A liposomal composition and a method of using the same for achieving intracellular delivery of a liposome-entrapped agent is described. The liposomes are composed of a pH sensitive lipid and include a targeting ligand to direct the liposomes to a target cell. The liposomes also include a stabilizing component, such a polymer-derivatized lipid, where the polymer is attached to the lipid by a releasable linkage. Administration of the liposomes results in cellular internalization and destabilization of the liposome for intracellular delivery of the entrapped agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:336918 USPATFULL
TITLE: Liposome composition for improved intracellular delivery of a therapeutic agent
INVENTOR(S): Zalipsky, Samuel, Redwood City, CA, UNITED STATES
Allen, Theresa M., Edmonton, CANADA
Huang, Shi Kun, Castro Valley, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002192275	A1	20021219	
APPLICATION INFO.:	US 2002-108154	A1	20020326	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-278869P	20010326	(60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ALZA CORPORATION, P O BOX 7210, INTELLECTUAL PROPERTY DEPARTMENT, MOUNTAIN VIEW, CA, 940397210
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Page(s)
LINE COUNT: 1652
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 4 OF 26 USPATFULL on STN
TI Liposomes comprising **peptide** antigens derived from X protein of hepatitis B virus
AB The present invention relates to liposomes comprising novel **peptide** antigens which play a role in regulating human immunity against hepatitis B virus, more specifically, to **peptide** groups corresponding to epitopes of antigens derived from X protein of HBV which induce cycotoxic T lymphocytes against the virus or immunological tolerance to the virus, and pH-sensitive liposomes comprising said **peptide** groups to induce cellular immunity so that CTLs specific to the virus can be produced. Since **peptide** antigens derived from X protein such as X3, X4, X5, X6 and X7 activate CTL which can recognize HBV antigens present in human body, and can also be recognized by the CTL, the said liposomes can be used for the development of proposed therapeutic agents for the prevention and treatment of HBV-associated diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:273552 USPATFULL
TITLE: Liposomes comprising **peptide** antigens derived from X protein of hepatitis B virus
INVENTOR(S): Kim, Tae-Yeon, Kyonggi-Do, KOREA, REPUBLIC OF
Lee, Ki-Young, Kyonggi-Do, KOREA, REPUBLIC OF
Chang, Jin-Soo, Seoul, KOREA, REPUBLIC OF
Cho, Sung-Yoo, Kyonggi-Do, KOREA, REPUBLIC OF
Hwang, Yu-Kyeong, Kyonggi-Do, KOREA, REPUBLIC OF
Choi, Myeong-Jun, Kyonggi-Do, KOREA, REPUBLIC OF
Cheong, Hong-Seok, Kyonggi-Do, KOREA, REPUBLIC OF
PATENT ASSIGNEE(S): Mogam Biotechnology Research Institute (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002151683	A1	20021017
APPLICATION INFO.:	US 2001-989621	A1	20011120 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-51006, filed on 30 Mar 1998, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DARBY & DARBY P.C., 805 Third Avenue, New York, NY, 10022
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 589
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 5 OF 26 USPATFULL on STN
TI Liposomes comprising **peptide** antigens derived from X protein of hepatitis B virus
AB The present invention relates to liposomes comprising novel **peptide** antigens which play a role in regulating human immunity against hepatitis B virus, more specifically, to **peptide** groups corresponding to epitopes of antigens derived from X protein of HBV which induce cytotoxic T lymphocytes against the virus or

immunological tolerance to the virus, and pH-sensitive liposomes comprising said **peptide** groups to induce cellular immunity so that CTLs specific to the virus can be produced. Since **peptide** antigens derived from X protein such as X3, X4, X5, X6 and X7 activate CTL which can recognize HBV antigens present in human body, and can also be recognized by the CTL, the liposomes can be used for the development of proposed therapeutic agents for the prevention and treatment of HBV-associated diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:95931 USPATFULL			
TITLE:	Liposomes comprising **peptide** antigens derived from X protein of hepatitis B virus			
INVENTOR(S):	Kim, Tae-Yeon, Kyonggi-Do, KOREA, REPUBLIC OF Lee, Ki-Young, Kyonggi-Do, KOREA, REPUBLIC OF Chang, Jin-Soo, Seoul, KOREA, REPUBLIC OF Cho, Sung-Yoo, Kyonggi-Do, KOREA, REPUBLIC OF Hwang, Yu-Kyeong, Kyonggi-Do, KOREA, REPUBLIC OF Choi, Myeong-Jun, Kyonggi-Do, KOREA, REPUBLIC OF Cheong, Hong-Seok, Kyonggi-Do, KOREA, REPUBLIC OF			
PATENT ASSIGNEE(S):	Mogam Biotechnology Research Institute, Kyonggi-Do, KOREA, REPUBLIC OF (non-U.S. corporation)			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6380359	B1	20020430	
	WO 9936434		19990722	
APPLICATION INFO.:	US 1998-51006		19980330	(9)
	WO 1998-KR10		19980119	
			19980330	PCT 371 date
	NUMBER		DATE	
PRIORITY INFORMATION:	WO 1998-KR10		19980119	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	GRANTED			
PRIMARY EXAMINER:	Carlson, Karen Cochrane			
ASSISTANT EXAMINER:	Robinson, Hope A.			
LEGAL REPRESENTATIVE:	Darby & Darby			
NUMBER OF CLAIMS:	2			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 3 Drawing Page(s)			
LINE COUNT:	531			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 6 OF 26 USPATFULL on STN

TI Phage with nuclear localization signal

AB A .lambda. phage with a nuclear localization signal has been obtained by constructing a vector capable of expressing a fused protein between a gpD protein constituting the head of a .lambda. phage and a nuclear localization signal sequence, transforming Escherichia coli with this vector, and propagating a mutant .lambda. phage which cannot express the gpD protein in E. coli in this transformant. It has been confirmed that the resulting .lambda. phage is capable of packaging .lambda. phage DNAs of 80% and 100% genome sizes. After further confirming that the nuclear localization signal exposed on the outside of the head of this phage, this phage has been microinjected into cells to analyze its nuclear localization activity. Thus, it has been clarified that this phage has a nuclear localization activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:78480 USPATFULL
TITLE:	Phage with nuclear localization signal
INVENTOR(S):	Nakanishi, Mahito, Osaka, JAPAN

Nagoshi, Emi, Osaka, JAPAN
Akuta, Teruo, Ibaraki, JAPAN
Takeda, Katsuo, Ibaraki, JAPAN
Hasegawa, Mamoru, Ibaraki, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002042135	A1	20020411
APPLICATION INFO.:	US 2001-844813	A1	20010427 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-615283, filed on 13 Jul 2000, GRANTED, Pat. No. US 6300120

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1996-US3861	19961227
	JP 1996-227787	19960809

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: CLARK & ELBING LLP, 176 FEDERAL STREET, BOSTON, MA, 02110-2214
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 676
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 7 OF 26 USPATFULL on STN
TI Induction of cytotoxic T-lymphocyte responses
AB Methods and compositions useful for inducing a cytotoxic T lymphocyte response (CTL) in a human or domesticated or agriculturally important animal. The method includes the steps of providing the antigen to which the CTL response is desired and providing a microfluidized antigen formulation which comprises, consists, or consists essentially of two or more of a stabilizing detergent, a micelle-forming agent, and an oil. This antigen formulation is preferably lacking in an immunostimulating **peptide** component, or has sufficiently low levels of such a component that the desired CTL response is not diminished. This formulation is provided as a stable oil-in-water emulsion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:72445 USPATFULL
TITLE: Induction of cytotoxic T-lymphocyte responses
INVENTOR(S): Raychaudhuri, Syamal, San Diego, CA, UNITED STATES
Rastetter, William H., Rancho Santa Fe, CA, UNITED STATES
Black, Amelia, Cardiff, CA, UNITED STATES
PATENT ASSIGNEE(S): IDEC PHARMACEUTICALS CORPORATION (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002039582	A1	20020404
APPLICATION INFO.:	US 2000-740003	A1	20001220 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-24220, filed on 17 Feb 1998, GRANTED, Pat. No. US 6197311 Continuation-in-part of Ser. No. US 1995-476674, filed on 7 Jun 1995, ABANDONED Continuation-in-part of Ser. No. US 1994-351001, filed on 7 Dec 1994, GRANTED, Pat. No. US 5709860 Continuation-in-part of Ser. No. US 1997-919787, filed on 29 Aug 1997, ABANDONED Continuation-in-part of Ser. No. US 1991-735069, filed on 25 Jul 1991, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Pillsbury Madison & Sutro LLP, Intellectual Property

Group, East Tower,Ninth Floor, 1100 New York Avenue, N.W., Washington, DC, 20005-3918
NUMBER OF CLAIMS: 84
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Page(s)
LINE COUNT: 1539
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 8 OF 26 USPATFULL on STN
TI Sandramycin analogs
AB Analogs of sandramycin (1) are synthesized and shown to have cytoxicity against various tumor cell types. The relative cytotoxic properties of the sandramycin analogs are approximately parallel tp their relative DNA binding affinities. An exception to this generalization is compound (4) which completely the sandramycin chromophore phenol. Although typically 4-10.times. less potent than sandramycin against leukemia cell lines, compound (4) proved to be 1-10,000.times. more potent against melanomas, carcinomas, and adenocarcinomas exhibiting IC.sub.50 values of 1 pM-10 nM. This activity places compound (4) amongst the most potent agents identified to date.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2001:226746 USPATFULL
TITLE: Sandramycin analogs
INVENTOR(S): Boger, Dale L., La Jolla, CA, United States
PATENT ASSIGNEE(S): The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6329497	B1	20011211	
	WO 9843663		19981008	
APPLICATION INFO.:	US 1999-381883		19991203	(9)
	WO 1998-US6058		19980327	
			19991203	PCT 371 date
			19991203	PCT 102(e) date

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Gitomer, Ralph
ASSISTANT EXAMINER: Khare, Devesh
LEGAL REPRESENTATIVE: Lewis, Donald G.
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 29 Drawing Figure(s); 26 Drawing Page(s)
LINE COUNT: 2755
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 9 OF 26 USPATFULL on STN
TI Phage with nuclear localization signal
AB A .lambda. phage with a nuclear localization signal has been obtained by constructing a vector capable of expressing a fused protein between a gpD protein constituting the head of a .lambda. phage and a nuclear localization signal sequence, transforming Escherichia coli with this vector, and propagating a mutant .lambda. phage which cannot express the gpD protein in E. coli in this transformant. It has been confirmed that the resulting .lambda. phage is capable of packaging .lambda. phage DNAs of 80% and 100% genome sizes. After further confirming that the nuclear localization signal exposed on the outside of the head of this phage, this phage has been microinjected into cells to analyze its nuclear localization activity. Thus, it has been clarified that this phage has a nuclear localization activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2001:173381 USPATFULL

TITLE: Phage with nuclear localization signal
INVENTOR(S): Nakanishi, Mahito, Osaka, Japan
Nagoshi, Emi, Osaka, Japan
Akuta, Teruo, Ibaraki, Japan
Takeda, Katsuo, Ibaraki, Japan
Hasegawa, Mamoru, Ibaraki, Japan
PATENT ASSIGNEE(S): DNAVEC Research Inc., Ibaraki, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6300120	B1	20011009
APPLICATION INFO.:	US 2000-615283		20000713 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 242131		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1996-227787	19960809

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Guzo, David
ASSISTANT EXAMINER: Leffers, Jr., Gerald G.
LEGAL REPRESENTATIVE: Clark & Elbing LLP
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 633
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 10 OF 26 USPATFULL on STN
TI Induction of cytotoxic T-lymphocyte responses
AB Methods and compositions useful for inducing a cytotoxic T lymphocyte response (CTL) in a human or domesticated or agriculturally important animal. The method includes the steps of providing the antigen to which the CTL response is desired and providing an antigen formulation which comprises, consists, or consists essentially of two or more of a stabilizing detergent, a micelle-forming agent, and an oil. This antigen formulation is preferably lacking in an immunostimulating **peptide** component, or has sufficiently low levels of such a component that the desired CTL response is not diminished. This formulation is provided as a stable oil-in-water emulsion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2001:125555 USPATFULL
TITLE: Induction of cytotoxic T-lymphocyte responses
INVENTOR(S): Raychaudhuri, Syamal, San Diego, CA, United States
Rastetter, William H., Rancho Santa Fe, CA, United States
PATENT ASSIGNEE(S): IDEC Pharmaceuticals Corporation, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6270769	B1	20010807
APPLICATION INFO.:	US 1995-449728		19950524 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1992-919787, filed on 24 Jul 1992, now patented, Pat. No. US 5585103 Continuation-in-part of Ser. No. US 1991-735069, filed on 25 Jul 1991, now abandoned		

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Woodward, Michael P.
ASSISTANT EXAMINER: Zeman, Mary K
LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis

NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 17 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 1168
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 11 OF 26 USPATFULL on STN
TI Method to provide for production of hair coloring pigments in hair follicles
AB The present invention describes a method for targeted and specific delivery of beneficial compounds, including hair dyes, melanin, proteins, and nucleic acids for gene therapy, to hair follicle cells using liposomes encapsulating the beneficial compound. Particularly preferred methods describe delivery of hair dyes, melanin or tyrosinase to the hair follicle for the purpose of improving hair color or condition, the delivery of compounds which prevent alopecia or stimulate hair growth, either by encapsulating a compound in liposomes, or by encapsulating a nucleic acid capable of expressing a protein in liposomes. Also described are liposome compositions for practicing the methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2001:111867 USPATFULL
TITLE: Method to provide for production of hair coloring pigments in hair follicles
INVENTOR(S): Li, Lingna, La Jolla, CA, United States
Lishko, Valeryi, Shaker Hts, OH, United States
PATENT ASSIGNEE(S): AntiCancer, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6261596	B1	20010717
APPLICATION INFO.:	US 1999-316763		19990521 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-858970, filed on 20 May 1997, now patented, Pat. No. US 5965157 Continuation-in-part of Ser. No. WO 1994-US3634, filed on 1 Apr 1994 Continuation-in-part of Ser. No. US 1994-181471, filed on 13 Jan 1994, now patented, Pat. No. US 5641508 Continuation-in-part of Ser. No. US 1993-41553, filed on 2 Apr 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Schwartzman, Robert A.
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 37 Drawing Figure(s); 16 Drawing Page(s)
LINE COUNT: 2815
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 12 OF 26 USPATFULL on STN
TI Phage bonded to a nuclear location signal
AB A .lambda. phage with a nuclear localization signal has been obtained by constructing a vector capable of expressing a fused protein between a gpD protein constituting the head of a .lambda. phage and a nuclear localization signal sequence, transforming Escherichia coli with this vector, and propagating a mutant .lambda. phage which cannot express the gpD protein in E. coli in this transformant. It has been confirmed that the resulting .lambda. phage is capable of packaging .lambda. phage DNAs of 80% and 100% genome sizes. After further confirming that the nuclear localization signal exposed on the outside of the head of this phage, this phage has been microinjected into cells to analyze its nuclear localization activity. Thus, it has been clarified that this phage has a

nuclear localization activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2001:75174 USPATFULL			
TITLE:	Phage bonded to a nuclear location signal			
INVENTOR(S):	Nakanishi, Mahito, Osaka, Japan Nagoshi, Emi, Osaka, Japan Akuta, Teruo, Ibaraki, Japan Takeda, Katsuo, Ibaraki, Japan Hasegawa, Mamoru, Ibaraki, Japan			
PATENT ASSIGNEE(S):	Dnavec Research, Ibaraki, Japan (non-U.S. corporation)			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6235521	B1	20010522	
	WO 9806828		19980219	
APPLICATION INFO.:	US 1999-242131		19990910	(9)
	WO 1996-JP3861		19961227	
			19990910	PCT 371 date
			19990910	PCT 102(e) date
	NUMBER		DATE	
PRIORITY INFORMATION:	JP 1996-227787		19960809	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Guzo, David			
ASSISTANT EXAMINER:	Leffers, Jr., Gerald G.			
LEGAL REPRESENTATIVE:	Clark & Elbing LLP			
NUMBER OF CLAIMS:	6			
EXEMPLARY CLAIM:	6			
NUMBER OF DRAWINGS:	7 Drawing Figure(s); 3 Drawing Page(s)			
LINE COUNT:	638			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 13 OF 26 USPATFULL on STN

TI Method for delivering beneficial compositions to hair follicles

AB The present invention is directed to introduce a replacement pigment into the hair shaft through the hair follicle using a formulation of a replacement pigment in a liposomal composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2001:63279 USPATFULL			
TITLE:	Method for delivering beneficial compositions to hair follicles			
INVENTOR(S):	Li, Lingna, La Jolla, CA, United States Lishko, Valervi, Shaker Hts., OH, United States			
PATENT ASSIGNEE(S):	AntiCancer, Inc., San Diego, CA, United States (U.S. corporation)			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6224901	B1	20010501	
APPLICATION INFO.:	US 1997-858929		19970520	(8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-486520, filed on 7 Jun 1995, now patented, Pat. No. US 5753263, issued on 19 May 1998 Continuation-in-part of Ser. No. WO 1994-US3634, filed on 1 Apr 1994 Continuation-in-part of Ser. No. US 1994-181471, filed on 13 Jan 1994, now patented, Pat. No. US 5641508 Continuation-in-part of Ser. No. US 1992-41553, filed on 2 Apr 1992, now abandoned			
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			

PRIMARY EXAMINER: Kishore, Gollamudi S.
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 37 Drawing Figure(s); 16 Drawing Page(s)
LINE COUNT: 2812
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 14 OF 26 USPATFULL on STN
TI Induction of cytotoxic T-lymphocyte responses
AB Methods and compositions useful for inducing a cytotoxic T lymphocyte response (CTL) in a human or domesticated or agriculturally important animal. The method includes the steps of providing the antigen to which the CTL response is desired and providing a microfluidized antigen formulation which comprises, consists, or consists essentially of two or more of a stabilizing detergent, a micelle-forming agent, and an oil. This antigen formulation is preferably lacking in an immunostimulating **peptide** component, or has sufficiently low levels of such a component that the desired CTL response is not diminished. This formulation is provided as a stable oil-in-water emulsion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2001:32809 USPATFULL
TITLE: Induction of cytotoxic T-lymphocyte responses
INVENTOR(S): Raychaudhuri, Syamal, San Diego, CA, United States
Rastetter, William H., Rancho Sante Fe, CA, United States
Black, Amelia, Cardiff, CA, United States
PATENT ASSIGNEE(S): IDEC Pharmaceuticals Corporation, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6197311	B1	20010306
APPLICATION INFO.:	US 1998-24220		19980217 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-476674, filed on 7 Jun 1995, now abandoned Continuation-in-part of Ser. No. US 1994-351001, filed on 7 Dec 1994, now patented, Pat. No. US 5709860 Continuation-in-part of Ser. No. US 1992-919787, filed on 24 Jul 1992, now patented, Pat. No. US 5585103 Continuation-in-part of Ser. No. US 1991-735069, filed on 25 Jul 1991, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Allen, Marianne P.
ASSISTANT EXAMINER: Zeman, Mary K
LEGAL REPRESENTATIVE: Teskin, Esq., Robin L.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 19 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 1119
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 15 OF 26 USPATFULL on STN
TI Method to provide for production of hair coloring pigments in hair follicles
AB The present invention provides a method to specifically target hair follicles with formulations which effect the production of hair coloring pigments in the follicle. Liposomal formulations for this purpose are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 1999:124494 USPATFULL
TITLE: Method to provide for production of hair coloring

pigments in hair follicles
INVENTOR(S): Li, Lingna, La Jolla, CA, United States
Lishko, Valeryi, Shaker Hts., OH, United States
PATENT ASSIGNEE(S): Anticancer Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5965157		19991012
APPLICATION INFO.:	US 1997-858970		19970520 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-486520, filed on 7 Jun 1995, now patented, Pat. No. US 5753263 which is a continuation-in-part of Ser. No. WO 1994-US3634, filed on 1 Apr 1994 which is a continuation-in-part of Ser. No. US 1994-181471, filed on 13 Jan 1994, now patented, Pat. No. US 5641508 which is a continuation-in-part of Ser. No. US 1992-41553, filed on 2 Apr 1992, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Degen, Nancy
ASSISTANT EXAMINER: Schwartzman, Robert
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 33 Drawing Figure(s); 19 Drawing Page(s)
LINE COUNT: 2816
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 16 OF 26 USPATFULL on STN
TI Methods to deliver macromolecules to hair follicles
AB The invention provides methods to deliver macromolecules to hair follicles selectively using formulations of these macromolecules in liposomal separations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 1999:69516 USPATFULL
TITLE: Methods to deliver macromolecules to hair follicles
INVENTOR(S): Li, Lingna, La Jolla, CA, United States
Lishko, Valeryi, Shaker Hts., OH, United States
PATENT ASSIGNEE(S): AntiCancer, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5914126		19990622
APPLICATION INFO.:	US 1997-858469		19970520 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-486520, filed on 7 Jun 1995, now patented, Pat. No. US 5753263 which is a continuation-in-part of Ser. No. WO 1994-US3634, filed on 1 Apr 1994 which is a continuation-in-part of Ser. No. US 1994-181471, filed on 13 Jan 1994, now patented, Pat. No. US 5641508 which is a continuation-in-part of Ser. No. US 1993-41553, filed on 2 Apr 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Degen, Nancy
ASSISTANT EXAMINER: Schwartzman, Robert
LEGAL REPRESENTATIVE: Murashige, Kate H.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 37 Drawing Figure(s); 16 Drawing Page(s)
LINE COUNT: 2805

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 17 OF 26 USPATFULL on STN
TI Lipidic vector for nucleic acid delivery
AB A simple, rapid method for creating a lipidic vector for delivery of a therapeutic molecule entails bringing the molecule into contact with a polycation, thereby forming a complex, and then mixing the complex with an anionic lipidic preparation. Tissue-specific targeting peptides, fusogenic peptides and nucleus-targeting peptides also can be added to the lipid preparation. The result is a stable lipidic vector of reduced immunogenicity and cytotoxicity. The vector also displays enhanced transfection activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	1999:63250 USPATFULL		
TITLE:	Lipidic vector for nucleic acid delivery		
INVENTOR(S):	Lee, Robert J., Pittsburgh, PA, United States Huang, Leaf, Wexford, PA, United States		
PATENT ASSIGNEE(S):	University of Pittsburgh, Pittsburgh, PA, United States (U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5908777		19990601
APPLICATION INFO.:	US 1995-494296		19950623 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Crouch, Deborah		
ASSISTANT EXAMINER:	Schmuck, Jill D.		
LEGAL REPRESENTATIVE:	Foley & Lardner		
NUMBER OF CLAIMS:	11		
EXEMPLARY CLAIM:	1,7		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)		
LINE COUNT:	646		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 18 OF 26 USPATFULL on STN
TI Method to deliver compositions conferring resistance to alopecia to hair follicles
AB The invention describes a method to deliver a composition selectively to hair follicles using a liposomal formulation. Proteins which are cell cycle inhibitors are products of the multi-drug resistance gene or the recombinant materials for their production are targeted to hair follicles by encapsulating them in liposomes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	1998:54518 USPATFULL		
TITLE:	Method to deliver compositions conferring resistance to alopecia to hair follicles		
INVENTOR(S):	Lishko, Valeryi, Shaker Hts., OH, United States Li, Lingna, La Jolla, CA, United States		
PATENT ASSIGNEE(S):	AntiCancer, Inc., San Diego, CA, United States (U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5753263		19980519
APPLICATION INFO.:	US 1995-486520		19950607 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-181471, filed on 13 Jan 1994, now patented, Pat. No. US 5641508 which is a continuation-in-part of Ser. No. US 1993-41553, filed on 2 Apr 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		

PRIMARY EXAMINER: Elliott, George C.
ASSISTANT EXAMINER: Schwartzman, Robert
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 37 Drawing Figure(s); 16 Drawing Page(s)
LINE COUNT: 2853
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 19 OF 26 USPATFULL on STN
TI Induction of cytotoxic T-lymphocyte responses
AB Methods and compositions useful for inducing a cytotoxic T lymphocyte response (CTL) in a human or domesticated or agriculturally important animal. The method includes the steps of providing the antigen to which the CTL response is desired and providing an antigen formulation which comprises, consists, or consists essentially of two or more of a stabilizing detergent, a micelle-forming agent, and an oil. This antigen formulation is preferably lacking in an immunostimulating **peptide** component, or has sufficiently low levels of such a component that the desired CTL response is not diminished. This formulation is provided as a stable oil-in-water emulsion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 1998:6785 USPATFULL
TITLE: Induction of cytotoxic T-lymphocyte responses
INVENTOR(S): Raychaudhuri, Syamal, San Diego, CA, United States
Rastetter, William H., Rancho Santa Fe, CA, United States
PATENT ASSIGNEE(S): IDEC Pharmaceuticals Corporation, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5709860		19980120
APPLICATION INFO.:	US 1994-351001		19941207 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1992-919787, filed on 24 Jul 1992 which is a continuation-in-part of Ser. No. US 1991-735069, filed on 25 Jul 1991, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Woodward, Michael P.
ASSISTANT EXAMINER: Zeman, Mary K.
LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis, LLP
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 19 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1242
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 20 OF 26 USPATFULL on STN
TI Induction of cytotoxic T-lymphocyte responses
AB Methods and compositions useful for inducing a cytotoxic T lymphocyte response (CTL) in a human or domesticated or agriculturally important animal. The method includes the steps of providing the antigen to which the CTL response is desired and providing an antigen formulation which comprises, consists, or consists essentially of two or more of a stabilizing detergent, a micelle-forming agent, and an oil. This antigen formulation is preferably lacking in an immunostimulating **peptide** component, or has sufficiently low levels of such a component that the desired CTL response is not diminished. This formulation is provided as a stable oil-in-water emulsion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 97:114941 USPATFULL

TITLE: Induction of cytotoxic T-lymphocyte responses
INVENTOR(S): Raychaudhuri, Syamal, San Diego, CA, United States
Rastetter, William H., Rancho Santa Fe, CA, United States
Black, Amelia, Cardiff, CA, United States
PATENT ASSIGNEE(S): IDEC Pharmaceuticals Corporation, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5695770		19971209
APPLICATION INFO.:	US 1995-472311		19950607 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1994-351001, filed on 7 Dec 1994 which is a continuation-in-part of Ser. No. US 1992-919787, filed on 24 Jul 1992, now patented, Pat. No. US 5585103, issued on 17 Dec 1996 which is a continuation-in-part of Ser. No. US 1991-735069, filed on 25 Jul 1991, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Woodward, Michael P.
ASSISTANT EXAMINER: Zeman, Mary K.
LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis, LLP
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 19 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1134
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 21 OF 26 USPATFULL on STN
TI Intracellular delivery of macromolecules
AB An improved liposome and related methods for using the liposome to facilitate the delivery of an extracellular agent to the cytoplasm of a target cell are provided. The improved liposomes include a phagosomal membrane permeabilizer, such as a hemolysin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 97:56367 USPATFULL
TITLE: Intracellular delivery of macromolecules
INVENTOR(S): Lee, Kyung-Dall, Providence, RI, United States
Portnoy, Daniel A., Philadelphia, PA, United States
Swanson, Joel A., Brookline, MA, United States
PATENT ASSIGNEE(S): President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)
University of Pennsylvania, Philadelphia, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5643599		19970701
APPLICATION INFO.:	US 1995-486764		19950607 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kishore, PhD, Gollamudi S.
LEGAL REPRESENTATIVE: Wolf, Greenfield & Sacks, P.C.
NUMBER OF CLAIMS: 38
EXEMPLARY CLAIM: 1
LINE COUNT: 1588
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 22 OF 26 USPATFULL on STN
TI Induction of cytotoxic T-lymphocyte responses
AB Methods and compositions useful for inducing a cytotoxic T lymphocyte response (CTL) in a human or domesticated or agriculturally important

animal. The method includes the steps of providing the antigen to which the CTL response is desired and providing an antigen formulation which comprises, consists, or consists essentially of two or more of a stabilizing detergent, a micelle-forming agent, and an oil. This antigen formulation is preferably lacking in an immunostimulating **peptide** component, or has sufficiently low levels of such a component that the desired CTL response is not diminished. This formulation is provided as a stable oil-in-water emulsion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	96:116114 USPATFULL
TITLE:	Induction of cytotoxic T-lymphocyte responses
INVENTOR(S):	Raychaudhuri, Syamal, San Diego, CA, United States Rastetter, William H., Rancho Santa Fe, CA, United States
PATENT ASSIGNEE(S):	IDEC Pharmaceutical Corporation, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5585103		19961217
APPLICATION INFO.:	US 1992-919787		19920724 (7)

RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1991-735069, filed on 25 Jul 1991, now abandoned
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Mosher, Mary E.
LEGAL REPRESENTATIVE:	Burns, Doane, Swecker & Mathis, LLP
NUMBER OF CLAIMS:	20
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	14 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT:	1139

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 23 OF 26 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

TI Pharmaco attributes of dioleoylphosphatidylethanolamine/ cholesterylhemisuccinate liposomes containing different types of cleavable lipopolymers.

AB Various amounts of one of three different types of cleavable methoxy polyethylene glycol (mPEG)-phospholipids or of a non-cleavable counterpart (mPEG-DSPE) were included into **pH-sensitive liposome** formulations containing dioleoylphosphatidylethanolamine (DOPE) and cholesterylhemisuccinate (CHEMS) at a 6:4 molar ratio, and the effect on plasma clearance and contents release rates was determined. The cleavable lipopolymers were all based on a distearoylphosphatidyl lipid anchor, which was linked to mPEG via dithiodipropionateaminoethanol (mPEG-DTP-DSPE), dithio-3-hexanol (mPEG-DTH-DSPA), or Gly-Phe-Leu-Gly-aminoethanol (mPEG-GFLG-DSPE) linkers. In contrast to the first-generation thiolytically cleavable lipopolymer, mPEG-DTP-DSPE, the second generation conjugates contained a hindered disulfide or enzymatically cleavable tetrapeptide, respectively, as the points of scission. In the absence of mPEG-lipid, DOPE/CHEMS liposomes had rapid clearance half-lives. As the mol% of mPEG-lipid in the liposomes increased, the rate of clearance of DOPE/CHEMS liposomes in mice decreased. Zeta-potential measurements showed that decreased clearance was correlated with a decrease in the apparent surface charge of the liposomes, which approached neutrality as the content of mPEG-lipids increased to above 15mol%. At these levels, liposomes containing mPEG-DTP-DSPE were cleared from blood circulation faster than liposomes containing other, less vulnerable lipopolymers. Liposomes with the **peptide**-linked lipopolymer exhibited the slowest clearance. The presence of either cleavable or non-cleavable mPEG-lipids at concentrations of 5mol% or higher in the DOPE/CHEMS liposomes inhibited the release of doxorubicin from these liposomes in

response to acid pH. .COPYRGT. 2003 Elsevier Ltd. All rights reserved.

ACCESSION NUMBER: 2003493717 EMBASE
TITLE: Pharmaco attributes of dioleoylphosphatidylethanolamine/cholesterylhemisuccinate liposomes containing different types of cleavable lipopolymers.
AUTHOR: Zhang J.X.; Zalipsky S.; Mullah N.; Pechar M.; Allen T.M.
CORPORATE SOURCE: T.M. Allen, Department of Pharmacology, University of Alberta, Edmonton, Alta. T6G 2H7, Canada. terry.allen@ualberta.ca
SOURCE: Pharmacological Research, (2004) 49/2 (185-198). Refs: 54 ISSN: 1043-6618 CODEN: PHMREP
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 030 Pharmacology
037 Drug Literature Index
039 Pharmacy
LANGUAGE: English
SUMMARY LANGUAGE: English

L16 ANSWER 24 OF 26 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
TI Investigation of antigen delivery route in vivo and immune-boosting effects mediated by pH-sensitive liposomes encapsulated with K(b)-restricted CTL epitope.
AB Using fluorescein isothiocyanate (FITC)-conjugated H-2K(b) CTL epitope (SIINFEKL) as a model system, we investigated the antigen delivery route by pH-sensitive liposomes in vivo. Fluorescence was initially detected in lymph nodes at 3 h after immunization, and its intensity reached a peak value in superticial inguinal lymph node at 9 h. No trace could be detected in spleen even with prolonged monitoring for up to 24 h. These results strongly suggest that the presentation of CTL-**peptide** antigen vehicled by pH-sensitive liposomes exclusively occurs in lymph nodes. In mice immunized with the H-2K(b) CTL epitope encapsulated pH-sensitive liposomes, **peptide**-specific CTL response was detected at day 3. The response was strongly augmented by the second immunization and persisted up to at least 45 days. These results suggest that **pH-sensitive liposome** formula functions as a potential adjuvant of **peptide** antigens and is useful for the induction of antigen specific CTLsv in vivo. .COPYRGT. 2002 Elsevier Science (USA).

ACCESSION NUMBER: 2002228767 EMBASE
TITLE: Investigation of antigen delivery route in vivo and immune-boosting effects mediated by pH-sensitive liposomes encapsulated with K(b)-restricted CTL epitope.
AUTHOR: Lee K.-Y.; Chun E.; Seong B.L.
CORPORATE SOURCE: B.L. Seong, Department of Biotechnology, Coll. of Eng./Bioproducts Res. Ctr., Yonsei University, 134 Shinchon-Dong, Seodaemun-Gu, Seoul 120-749, Korea, Republic of. blseong@yonsei.ac.kr
SOURCE: Biochemical and Biophysical Research Communications, (2002) 292/3 (682-688). Refs: 33 ISSN: 0006-291X CODEN: BBRCA
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 026 Immunology, Serology and Transplantation
037 Drug Literature Index
039 Pharmacy
LANGUAGE: English
SUMMARY LANGUAGE: English

L16 ANSWER 25 OF 26 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
TI Hepatitis B virus protein X-derived **peptide** antigens used to

stimulate cytotoxic T lymphocytes, useful for treatment of HBV-associated diseases, especially liver cancer.

AN 1999-444387 [37] WPIDS

AB WO 9936434 A UPAB: 20011203

NOVELTY - **Peptide** antigens (I to V) derived from X protein of hepatitis B virus (HBV) recognized by cytotoxic T lymphocytes (CTL) are new.

DETAILED DESCRIPTION - **Peptide** antigens (I to V) derived from X protein of HBV recognized by CTL to show cytotoxicity against HBV have the following sequences:

HLSLRGLFV (I);
VHLKRTLGL (II);
AMSTTDLEA (III);
CLFKDWEEL (IV);
EIRLKVFVL (V).

An INDEPENDENT CLAIM is also included for a **pH-sensitive liposome** comprising **peptide** antigens, which is prepared by mixing phospholipid and one or more peptides derived from HBV X protein as above in a molar ratio of 5:1 to 25:1.

ACTIVITY - Cytotoxic; Immunoprotective; Cytostatic; Antiviral.

MECHANISM OF ACTION - Hepatitis B Viral Antigens.

USE - The **peptide** antigens derived from HBV X protein are useful for inducing CTLs against the virus or inducing immunological tolerance to the virus. pH-sensitive liposomes containing the **peptide** antigens are used to induce cellular immunity so that CTLs specific to the virus can be produced. This is useful for prevention and treatment of HBV-associated diseases, especially HBV-associated liver cancer.

ADVANTAGE - pH-sensitive liposomes permit the selective transportation of anti-cancer drugs.

Dwg.0/3

ACCESSION NUMBER: 1999-444387 [37] WPIDS
DOC. NO. CPI: C1999-130924
TITLE: Hepatitis B virus protein X-derived **peptide** antigens used to stimulate cytotoxic T lymphocytes, useful for treatment of HBV-associated diseases, especially liver cancer.
DERWENT CLASS: B04 B05 D16
INVENTOR(S): CHANG, J; CHEONG, H; CHO, S; CHOI, M; HWANG, Y; KIM, T; LEE, K
PATENT ASSIGNEE(S): (MOGA-N) MOGAM BIOTECHNOLOGY RES INST
COUNTRY COUNT: 23
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9936434	A1	19990722	(199937)*	EN	33
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
W: AU CA CN JP RU US					
AU 9856815	A	19990802	(199954)		
EP 1049711	A1	20001108	(200062)	EN	
R: DE					
CN 1286696	A	20010307	(200140)		
US 6380359	B1	20020430	(200235)		
JP 2002509157	W	20020326	(200236)		30
US 2002151683	A1	20021017	(200275)#		
RU 2189989	C2	20020927	(200278)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9936434	A1	WO 1998-KR10	19980119

AU 9856815	A	AU 1998-56815	19980119
		WO 1998-KR10	19980119
EP 1049711	A1	EP 1998-901120	19980119
		WO 1998-KR10	19980119
CN 1286696	A	CN 1998-813201	19980119
		WO 1998-KR10	19980119
US 6380359	B1	WO 1998-KR10	19980119
		US 1998-51006	19980330
JP 2002509157	W	WO 1998-KR10	19980119
		JP 2000-540149	19980119
US 2002151683	A1 Div ex	US 1998-51006	19980330
		US 2001-989621	20011120
RU 2189989	C2	WO 1998-KR10	19980119
		RU 2000-121960	19980119

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9856815	A	Based on	WO 9936434
EP 1049711	A1	Based on	WO 9936434
US 6380359	B1	Based on	WO 9936434
JP 2002509157	W	Based on	WO 9936434
RU 2189989	C2	Based on	WO 9936434

PRIORITY APPLN. INFO: WO 1998-KR10 19980119; US 2001-989621 20011120

L16 ANSWER 26 OF 26 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

TI Improved vaccine for treating cancer, infectious disease and auto-immune disease - comprises encapsulated antigen and immuno-modulator, and uses **pH-sensitive liposome**(s).

AN 1998-437175 [37] WPIDS

AB WO 9833520 A UPAB: 19980916

An improved vaccine composition (I), which increases the immunological activity of (I), comprises: at least 1 antigen which elicits an immune response (IR); at least 1 immunomodulator (IMM) for increasing the size and frequency of the induced IR, and a carrier for delivering the antigen into the endocytic pathway of antigen processing and presentation of antigen-presenting cells (APCs), so that the antigen is presented on the cell surface of an APC together with a class I histocompatibility (HLA) molecule, when administration to a human, such that the antigen induces a CD8+ T-cell response. (I) is a slow-release vehicle which can deliver both the antigen and the IMM to immune cells. Also new is an assay for determining whether a CD8+ T-cell response to a target antigen has occurred in a subject, by: (a) coating a PDVF (polyvinylidene fluoride) membrane surface with anticytokine antibodies; (b) pretreating target cells with an agent, such as interferon gamma , for 2 days, which upregulates the expression of HLA class I antigen on the surface of the target cells to increase the amount of antigen(s) they present; (c) adding to the membrane target cells which carry the target antigen on their surfaces to produce a suspension; (d) obtaining a sample of peripheral blood cells from the subject and depleting the sample of monocytes to provide effector cells; (e) adding about 500000 effector cells to the suspension to obtain a test sample; (f) adding antibodies (Abs) which block class II HLA molecules to (e); (g) adding to (f) Abs which bind to CD4 or CD8 cell surface antigens; (h) preparing the blocking Abs used in (f) and (g) by dialysis to minimise denaturation and to remove contaminating impurities, and thus improve the activity of the Abs; (i) adding to the test sample 10-20 nM test antigen or **peptide**, which remain in the sample for the duration of the assay; (j) incubating the test samples to allow any CD8+ T-cells in the sample which recognise the antigen to respond by secreting cytokine, and (k) measuring the number of CD8+ T-cells recognising antigen by counting the

cells which produced cytokine in all of the test samples and subtracting the number of cytokine-producing cells in those test samples to which Abs of step (f) were added from test samples conducted in the absence of Abs.

The carrier is a virosome, a **pH-sensitive liposome** or a liposome containing lipophylic polylysine, which is encapsulates the antigen and at least 1 IMM. The carrier is a chloroform-free **pH-sensitive liposome** comprising DOPE (dioleoylphosphatidyl ethanolamine) and CHEMS (cholesteryl hemisuccinate) which are formed at a pH of 8.5-9.5. The liposomes are formed at the highest concentration of lipid possible, to maximise the amount of antigens and IMMs that can be encapsulated. The carrier may be a particulate bead made of glass, iron, biodegradable polymer, or other material.

USE - (I) is used for preventing or treating melanoma or cancers such as breast, lung, colon, prostate, stomach, gastro-intestinal tract, brain, ovary, blood cell cancer and so on. (I) is used in the prevention and treatment of infectious diseases, such as those caused by bacteria, fungi, viruses, mycoplasma, prions and other agents. Autoimmune diseases are treated with (I) which inhibits or blocks the autoimmune process.

Dwg.0/3

ACCESSION NUMBER: 1998-437175 [37] WPIDS
DOC. NO. NON-CPI: N1998-340606
DOC. NO. CPI: C1998-132897
TITLE: Improved vaccine for treating cancer, infectious disease and auto-immune disease - comprises encapsulated antigen and immuno-modulator, and uses **pH-sensitive liposome**(s).
DERWENT CLASS: A96 B04 S03
INVENTOR(S): BYSTRYN, J
PATENT ASSIGNEE(S): (BYST-I) BYSTRYN J
COUNTRY COUNT: 20
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9833520	A1	19980806	(199837)*	EN	70
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
W: JP US					
EP 983086	A1	20000308	(200017)	EN	
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9833520	A1	WO 1998-US2463	19980205
EP 983086	A1	EP 1998-906248	19980205
		WO 1998-US2463	19980205

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 983086	A1 Based on	WO 9833520

PRIORITY APPLN. INFO: US 1997-37217P 19970205

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L4: Entry 1 of 1 File: USPT Nov 24, 1998

DOCUMENT-IDENTIFIER: US 5840303 A

**** See image for Certificate of Correction ****

TITLE: Peptides for inducing cytotoxic T lymphocyte responses to hepatitis B virus

Brief Summary Text (13):

Compositions are provided which comprise a peptide of the invention formulated with an additional peptide, a liposome, an adjuvant and/or a pharmaceutically acceptable carrier. Thus, pharmaceutical compositions can be used in methods of treating acute HBV infection, particularly in an effort to prevent the infection from progressing to a chronic or carrier state. Methods for treating chronic HBV infection and HBV carrier states are also provided, where the pharmaceutical compositions are administered to infected individuals in amounts sufficient to stimulate immunogenically effective cytotoxic T cell responses against HBc epitopes. For treating these infections it may be particularly desirable to combine the peptides which induce MHC class I restricted cytotoxic T lymphocyte responses against HBV antigen with other peptides or proteins that induce immune response to other HBV antigens, such as HBsAg. To treat individuals with chronic or carrier state infections the compositions may be administered in repeated dosages over a prolonged period of time, as necessary, to resolve or substantially mitigate the infection and/or shedding of virus.

Detailed Description Text (61):

The peptides of the invention may also be administered via liposomes, which serve to target the peptides to a particular tissue, such as lymphoid tissue or HBV-infected hepatic cells. Liposomes can also be used to increase the half-life of the peptide composition. Liposomes useful in the present invention include emulsions, foams, micelles, insoluble monolayers, liquid crystals, phospholipid dispersions, lamellar layers and the like. In these preparations the peptide to be delivered is incorporated as part of a liposome, alone or in conjunction with a molecule which binds to, e.g., a receptor, prevalent among lymphoid cells, such as monoclonal antibodies which bind to the CD45 antigen, or with other therapeutic or immunogenic compositions. Thus, liposomes filled with a desired peptide of the invention can be directed to the site of lymphoid or hepatic cells, where the liposomes then deliver the selected therapeutic/immunogenic peptide compositions. Liposomes for use in the invention are formed from standard vesicle-forming lipids, which generally include neutral and negatively charged phospholipids and a sterol, such as cholesterol. The selection of lipids is generally guided by consideration of, e.g., liposome size and stability of the liposomes in the blood stream. A variety of methods are available for preparing liposomes, as described in, e.g., Szoka et al., Ann. Rev. Biophys. Bioeng. 9:467 (1980), U.S. Pat. Nos. 4,235,871, 4,501,728, 4,837,028, and 5,019,369, incorporated herein by reference. For targeting to the immune cells, a ligand to be incorporated into the liposome can include, e.g., antibodies or fragments thereof specific for cell surface determinants of the desired immune system cells. A liposome suspension containing a peptide may be administered intravenously, locally, topically, etc. in a dose which varies according to, the mode of administration, the peptide being delivered, the stage of disease being treated, etc.

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Term: L3 and l2

Display: 10 **Documents in Display Format:** CIT **Starting with Number** 1

Generate: ○ **Hit List** ◉ **Hit Count** ○ **Side by Side** ○ **Image**

Search Clear Interrupt

Search History

DATE: Tuesday, December 30, 2003 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT; PLUR=YES; OP=OR			
L4	L3 and l2	1	L4
L3	5840303.pn.	1	L3
L2	pH-sensitive liposome	24119	L2
L1	liposome	23077	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L7 and L3	0

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L11

Refine Search | Recall Text | Clear | Interrupt

Search History

DATE: Tuesday, December 30, 2003 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT; PLUR=YES; OP=OR			
L11	l7 and l3	0	L11
L10	l6 and l3	0	L10
L9	L8 and l3	0	L9
L8	L7 and l6	13	L8
L7	POPE	6523	L7
L6	CHOH	6174	L6
L5	CHOH	6174	L5
L4	L3 and l2	1	L4
L3	5840303.pn.	1	L3
L2	pH-sensitive liposome	24119	L2
L1	liposome	23077	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L7 and L3	0

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L11

Refine Search

Recall Text | Clear | Interrupt

Search History

DATE: Tuesday, December 30, 2003 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT; PLUR=YES; OP=OR			
L11	l7 and l3	0	L11
L10	l6 and l3	0	L10
L9	L8 and l3	0	L9
L8	L7 and l6	13	L8
L7	POPE	6523	L7
L6	CHOH	6174	L6
L5	CHOH	6174	L5
L4	L3 and l2	1	L4
L3	5840303.pn.	1	L3
L2	pH-sensitive liposome	24119	L2
L1	liposome	23077	L1

END OF SEARCH HISTORY

Hit List

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Search Results - Record(s) 1 through 5 of 5 returned.

☐ 1. Document ID: US 6252136 B1

L3: Entry 1 of 5 File: USPT Jun 26, 2001

US-PAT-NO: 6252136
DOCUMENT-IDENTIFIER: US 6252136 B1

TITLE: Transgenic organisms having tetracycline-regulated transcriptional regulatory systems

DATE-ISSUED: June 26, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bujard; Hermann	Heidelberg			DE
Gossen; Manfred	El Cerrito	CA		
Salfeld; Jochen G.	North Grafton	MA		
Voss; Jeffrey W.	West Boylston	MA		

US-CL-CURRENT: 800/278; 435/320.1, 435/468, 435/69.1, 435/69.7, 800/288, 800/298

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 2. Document ID: US 5888981 A

L3: Entry 2 of 5 File: USPT Mar 30, 1999

US-PAT-NO: 5888981
DOCUMENT-IDENTIFIER: US 5888981 A

TITLE: Methods for regulating gene expression

DATE-ISSUED: March 30, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bujard; Hermann	Heidelberg			DE
Gossen; Manfred	El Cerrito	CA		
Salfeld; Jochen G.	North Grafton	MA		
Voss; Jeffrey W.	West Boylston	MA		

US-CL-CURRENT: 514/44; 424/93.21, 435/455, 435/463, 435/465

Full | Title | Citation | Front | Review | Classification | Date | Reference | ... | Claims | KWIC | Draw De

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☐ 3. Document ID: US 5733726 A

L3: Entry 3 of 5 File: USPT Mar 31, 1998

US-PAT-NO: 5733726
DOCUMENT-IDENTIFIER: US 5733726 A
**** See image for Certificate of Correction ****

TITLE: Cytotoxicity-based genetic selection system (TOXSEL)

DATE-ISSUED: March 31, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fu; Haian	Atlanta	GA		
Collier; R. John	Wellesley	MA		
Dingledine; Raymond	Athens	GA		

US-CL-CURRENT: 435/6; 435/254.2, 435/320.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | ... | Claims | KWIC | Draw De

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☐ 4. Document ID: US 5464758 A

L3: Entry 4 of 5 File: USPT Nov 7, 1995

US-PAT-NO: 5464758
DOCUMENT-IDENTIFIER: US 5464758 A

TITLE: Tight control of gene expression in eucaryotic cells by tetracycline-responsive promoters

DATE-ISSUED: November 7, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gossen; Manfred	D-69115 Heidelberg			DE
Bujard; Hermann	D-69120 Heidelberg			DE

US-CL-CURRENT: 435/69.1; 435/320.1, 435/366, 435/70.1, 536/23.4, 536/24.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | ... | Claims | KWIC | Draw De

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☐ 5. Document ID: US 5204446 A

L3: Entry 5 of 5 File: USPT Apr 20, 1993

US-PAT-NO: 5204446
DOCUMENT-IDENTIFIER: US 5204446 A

TITLE: Polypeptide having immunoreactivity with antibody specific to hepatitis B virus

DATE-ISSUED: April 20, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kumazawa; Toshiaki	Hachioji			JP
Osanai; Masatoshi	Hachioji			JP

US-CL-CURRENT: 530/325; 530/324, 530/329

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw. De

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Terms	Documents
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Search Results - Record(s) 1 through 9 of 9 returned.

☐ 1. Document ID: US 6252136 B1

L5: Entry 1 of 9 File: USPT Jun 26, 2001

US-PAT-NO: 6252136
DOCUMENT-IDENTIFIER: US 6252136 B1

TITLE: Transgenic organisms having tetracycline-regulated transcriptional regulatory systems

DATE-ISSUED: June 26, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bujard; Hermann	Heidelberg			DE
Gossen; Manfred	El Cerrito	CA		
Salfeld; Jochen G.	North Grafton	MA		
Voss; Jeffrey W.	West Boylston	MA		

US-CL-CURRENT: 800/278; 435/320.1, 435/468, 435/69.1, 435/69.7, 800/288, 800/298

Full | Title | Citation | Front | Review | Classification | Date | Reference | ... | Claims | KWMC | Draw De

☐ 2. Document ID: US 5981274 A

L5: Entry 2 of 9 File: USPT Nov 9, 1999

US-PAT-NO: 5981274
DOCUMENT-IDENTIFIER: US 5981274 A

TITLE: Recombinant hepatitis virus vectors

DATE-ISSUED: November 9, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tyrrell; D. Lorne J.	Edmonton, Alberta			CA
Chaisomchit; Sumonta	Edmonton, Alberta			CA
Chang; Lung-Ji	Edmonton, Alberta			CA

US-CL-CURRENT: 435/320.1; 435/243, 435/349, 435/370

Full | Title | Citation | Front | Review | Classification | Date | Reference | ... | Claims | KWMC | Draw De

☐ 3. Document ID: US 5922927 A

L5: Entry 3 of 9 File: USPT Jul 13, 1999

US-PAT-NO: 5922927
DOCUMENT-IDENTIFIER: US 5922927 A

TITLE: Methods for producing tetracycline-regulated transgenic mice

DATE-ISSUED: July 13, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bujard; Hermann	Heidelberg			DE
Gossen; Manfred	Heidelberg			DE
Salfeld; Jochen G.	North Grafton	MA		
Voss; Jeffrey W.	Framingham	MA		

US-CL-CURRENT: 800/25; 435/320.1, 435/325, 435/455, 435/463, 435/69.1, 800/18, 800/22

Full | Title | Citation | Front | Review | Classification | Date | Reference | ... | Claims | KWMC | Draw De

☐ 4. Document ID: US 5888981 A

L5: Entry 4 of 9 File: USPT Mar 30, 1999

US-PAT-NO: 5888981
DOCUMENT-IDENTIFIER: US 5888981 A

TITLE: Methods for regulating gene expression

DATE-ISSUED: March 30, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bujard; Hermann	Heidelberg			DE
Gossen; Manfred	El Cerrito	CA		
Salfeld; Jochen G.	North Grafton	MA		
Voss; Jeffrey W.	West Boylston	MA		

US-CL-CURRENT: 514/44; 424/93.21, 435/455, 435/463, 435/465

Full | Title | Citation | Front | Review | Classification | Date | Reference | ... | Claims | KWMC | Draw De

☐ 5. Document ID: US 5859310 A

L5: Entry 5 of 9 File: USPT Jan 12, 1999

US-PAT-NO: 5859310
DOCUMENT-IDENTIFIER: US 5859310 A
**** See image for Certificate of Correction ****

TITLE: Mice transgenic for a tetracycline-controlled transcriptional activator

DATE-ISSUED: January 12, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bujard; Hermann	Heidelberg			DE
Gossen; Manfred	El Cerrito	CA		
Salfeld; Jochen G.	Noth Graton	MA		
Voss; Jeffrey W.	West Boylson	MA		

US-CL-CURRENT: 800/9; 435/320.1, 435/325, 435/69.1, 435/70.1, 514/152, 536/23.4, 536/24.1, 800/18, 800/22, 800/25, 800/4

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw De

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☐ 6. Document ID: US 5733726 A

L5: Entry 6 of 9 File: USPT Mar 31, 1998

US-PAT-NO: 5733726
DOCUMENT-IDENTIFIER: US 5733726 A
**** See image for Certificate of Correction ****

TITLE: Cytotoxicity-based genetic selection system (TOXSEL)

DATE-ISSUED: March 31, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fu; Haian	Atlanta	GA		
Collier; R. John	Wellesley	MA		
Dingledine; Raymond	Athens	GA		

US-CL-CURRENT: 435/6; 435/254.2, 435/320.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw De

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☐ 7. Document ID: US 5650298 A

L5: Entry 7 of 9 File: USPT Jul 22, 1997

US-PAT-NO: 5650298
DOCUMENT-IDENTIFIER: US 5650298 A

TITLE: Tight control of gene expression in eucaryotic cells by tetracycline-responsive promoters

DATE-ISSUED: July 22, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bujard; Hermann	Heidelberg			DE
Gossen; Manfred	Heidelberg			DE
Salfeld; Jochen G.	North Grafton	MA		
Voss; Jeffrey W.	Framingham	MA		

US-CL-CURRENT: 435/69.7; 435/320.1, 435/463, 536/23.4, 536/24.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw De

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☐ 8. Document ID: US 5464758 A

L5: Entry 8 of 9 File: USPT Nov 7, 1995

US-PAT-NO: 5464758
DOCUMENT-IDENTIFIER: US 5464758 A

TITLE: Tight control of gene expression in eucaryotic cells by tetracycline-responsive promoters

DATE-ISSUED: November 7, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gossen; Manfred	D-69115 Heidelberg			DE
Bujard; Hermann	D-69120 Heidelberg			DE

US-CL-CURRENT: 435/69.1; 435/320.1, 435/366, 435/70.1, 536/23.4, 536/24.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw De

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☐ 9. Document ID: US 5204446 A

L5: Entry 9 of 9 File: USPT Apr 20, 1993

US-PAT-NO: 5204446
DOCUMENT-IDENTIFIER: US 5204446 A

TITLE: Polypeptide having immunoreactivity with antibody specific to hepatitis B virus

DATE-ISSUED: April 20, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kumazawa; Toshiaki	Hachioji			JP
Osanai; Masatoshi	Hachioji			JP

US-CL-CURRENT: 530/325; 530/324, 530/329

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

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Terms	Documents
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Search Results - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: US 6528087 B2

L7: Entry 1 of 3 File: USPT Mar 4, 2003

US-PAT-NO: 6528087
DOCUMENT-IDENTIFIER: US 6528087 B2

TITLE: Kits for forming protein-linked lipidic microparticles

DATE-ISSUED: March 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Papahadjopoulos; Demetrios	San Francisco	CA		
Hong; Keelung	San Francisco	CA		
Zheng; Weiwen	San Francisco	CA		
Kirpotin; Dmitri B.	San Francisco	CA		

US-CL-CURRENT: 424/450

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw. De

☐ 2. Document ID: US 6210707 B1

L7: Entry 2 of 3 File: USPT Apr 3, 2001

US-PAT-NO: 6210707
DOCUMENT-IDENTIFIER: US 6210707 B1

TITLE: Methods of forming protein-linked lipidic microparticles, and compositions thereof

DATE-ISSUED: April 3, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Papahadjopoulos; Demetrios	San Francisco	CA		
Hong; Keelung	San Francisco	CA		
Zheng; Weiwen	San Francisco	CA		
Kirpotin; Dmitri B.	San Francisco	CA		

US-CL-CURRENT: 424/450; 435/440, 435/6, 435/7.1, 435/7.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | ... | Claims | KWIC | Draw De

☐ 3. Document ID: US 5932241 A

L7: Entry 3 of 3 File: USPT Aug 3, 1999

US-PAT-NO: 5932241
DOCUMENT-IDENTIFIER: US 5932241 A

TITLE: Cationic lipid DNA complexes for gene targeting

DATE-ISSUED: August 3, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gorman; Cori M.	San Francisco	CA		

US-CL-CURRENT: 424/450; 435/320.1, 435/455, 435/458

Full | Title | Citation | Front | Review | Classification | Date | Reference | ... | Claims | KWIC | Draw De

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Terms	Documents
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